

L'UOMO E I QUATTRO ELEMENTI

ALLA SORGENTE DEL BENESSERE MASCHILE

11-13 settembre 2021

Centro Congressi Riva del Garda TN

Congresso Nazionale SIA
45⁰ ANNO



Presidente SIA
Alessandro Palmieri

Presidente del Congresso
Tommaso Cai

Presidente Onorario
Gianni Malossini



Segreteria scientifica:
Società Italiana di Andrologia
Via Torino 135, 00184 Roma
Tel. 06 80691301 sia@andrologiaitaliana.it



Segreteria organizzativa:
SIA Eventi srl
Via Torino 135, 00184 Roma
Tel. 06 80691301 sia@andrologiaitaliana.it

COMUNICAZIONI

Codice: **C01**

IS TOPICAL ALPROSTADIL AN USABLE AND RELIABLE ALTERNATIVE TO INTRACAVERNOUS INJECTION FOR PENILE DYNAMIC DUPLEX ULTRASONOGRAPHY?

Celeste Manfredi^{1,2}; Davide Arcaniolo¹; Giuseppe Bellastella³; Marco Stizzo^{1,2}; Carmelo Quattrone¹; Francesco Bottone¹; Ugo Amicuzi^{1,2}; Francesco Paolo Calace^{1,2}; Paolo Verze²; Marco De Sio¹

¹ Department of Woman, Child and General and Specialized Surgery, Urology Unit, University of Campania "Luigi Vanvitelli", Naples, Italy

² Department of Neurosciences, Reproductive Sciences, and Odontostomatology, Urology Unit, University of Naples "Federico II", Naples, Italy

³ Department of Medical, Surgical, Neurological, Metabolic and Geriatric Sciences, Endocrinology and Metabolic Diseases Unit, University of Campania "Luigi Vanvitelli", Naples, Italy

Introduction Penile Dynamic Duplex Ultrasonography (PDDU) represents an objective tool to examine the penile hemodynamic.

It may be necessary to complete the assessment of erectile dysfunction (ED) in selected patients.

No study has yet been done to evaluate topical alprostadil as a less invasive alternative vasoactive agent for PDDU in the diagnosis of ED.

The main aim of our study was to evaluate the usability and reliability of topical alprostadil for PDDU compared with standard intracavernous injection.

A further objective was to determine the patients' preference between these two different approaches.

Methods Patients with ED referred to our clinic between September 2018 and February 2019 were enrolled in the study. During session A, patients received intracavernous injection (10 µg) while during session B, they received topical application (300 µg/100 mg). Each patient underwent both sessions, 1 week apart from the other. Computer-based randomization (1:1) was used to assign patients to the initial session (A or B). During both sessions, several vascular parameters, including peak systolic velocity (PSV), end-diastolic velocity (EDV) and resistance index (RI), were recorded before the drug administration and after 5, 10, 15 and 20 min. Furthermore, the Erection Hardness Score (EHS) was reported for each patient. At the end of each session, patients were asked to describe the level of pain/discomfort during the procedure using a 0–10 Numeric Rating Scale (NRS). At the end of the study, patients were asked which session (A or B) they preferred. We used the median as a measure of central tendency and the interquartile range (IQR) as a measure of statistical dispersion. The Wilcoxon test was used to analyse the difference between the two groups.

Results A total of 80 patients were enrolled. After 5, 10, 15 and 20 min from drug administration, no significant difference was found between the two procedures in terms of PSV and EDV, while the median EHS was significantly higher after injection at 10, 15 and 20 min. In three patients, the examination performed with the topical drug led to an incorrect classification of the patients. Patients experienced significantly less pain/discomfort during session B compared with session A, the overall patients' preference was in favour of session B.

Conclusions Topical alprostadil could represent a usable and reliable alternative to intracavernous injection for PDDU, with less discomfort and greater preference by patients.

Lo studio ha avuto finanziamenti: No

Codice: **C02**

EFFICACY OF FSH AND HCG TREATMENT IN INFERTILE IPOGONADAL MEN: A MULTICENTER ANALYSIS

Carlo Maretti, **Riccardo Lombardo**, Egidio Andriani, Nicola Arrighi, Giovanni Beretta, Bruno Bianchi, Domenico Canale, Maurizio Carrino, Mirco Castiglioni, Fulvio Colombo, Antonio Corvasce, Cosimo De Nunzio, Aldo Di

Filippo, Andrea Fabiana, Marco Fasbender Jacobitti, Vincenzo Favilla, Alessandro Franceshelli, Antonio Raffaele Granata, Antonio Maria Granata, Michele Guidotti, Emilio Italiano, Pierluigi Izzo, Maurizio Mercenario, Edoardo Pescatori, Giorgio Piubello, Pietro Salacone, Giuseppe Sidoti, Marcello Soli, Rosario Tammaro, Paolo Turchi, Gianni Ughi, Daniele Vecchio, Mario Vetri, Giorgio Franco, The Winner collaborative group.

Società Italiana di Andrologia – SIA

Background In the past years, some studies have evaluated the efficacy of HCG and FSH treatment in infertile ipogonadal patients. Aim of our study was to evaluate the efficacy of FSH and HCG treatment.

Methods A consecutive series of patients referring to the fertility clinic with ipogonadism and infertility were consecutively enrolled in 12 centers.

All patients underwent detailed medical history, physical examination, semen analysis and serum levels of LH, FSH, testosterone and estradiol levels. Inclusion criteria included testosterone <3,5ng/ml and FSH < 8 UI/ml.

All patients underwent treatment with FSH 150 UI 3 times a week for 3 months and HCG treatment 2000 UI 2 times a week.

At three months patients underwent semen analysis. Successful trifecta treatment was defined as successful improvement of sperm concentration, progressive motility and typical morphology. Improvements were defined as follows.

- Sperm Concentration >15 Mil/ml and/or 100% improvement in sperm concentration
- Progressive Motility >32% and/or 100% improvement in progressive motility
- Typical Morphology >4 % and/or 100% improvement in typical morphology

Results Overall 37 patients were prospectively enrolled with a median age of 35 (31/38) years, median BMI of 31 (27/34) kg/m², median testicular volume of 16 (13/20) ml and median testosterone levels of 2,7 (2/3,1) ng/ml. Statistically significant improvements in sperm concentration, progressive motility and typical morphology were recorded (Table 1). Overall, after HCG/FSH treatment 48% of the patients improved sperm concentration, 45% improved progressive motility and 54% improved typical morphology. Overall 85% of the patients improved at least one parameter and 22% achieved the trifecta outcome.

Conclusions In patients ipogonadal men treatment with HCG and FSH results in statistically significant improvements in all semen parameters. Further studies should evaluate possible predictors of successful treatment.

Lo studio ha avuto finanziamenti: No

Codice: **C03**

CHALLENGING EAU GUIDELINES: PROPOSAL OF A NEW SPERM CONCENTRATION CUT-OFF FOR CFTR GENE TESTING IN INFERTILE MEN

Walter Cazzaniga¹, Paolo Capogrosso¹, Luca Boeri^{1,3}, Eugenio Ventimiglia¹, Edoardo Pozzi¹, Federico Belladelli^{1,2}, Luigi Candela¹, Davide Oreggia¹, Rayan Matloob¹, Lina Bua¹, Costantino Abbate¹, Francesco Montorsi^{1,2}, Andrea Salonia^{1,2}

¹ Division of Experimental Oncology/Unit of Urology; URI; IRCCS Ospedale San Raffaele, Milan, Italy

² University Vita-Salute San Raffaele, Milan, Italy

³ Department of Urology, Foundation IRCCS Ca' Granda – Ospedale Maggiore Policlinico, University of Milan, Milan, Italy

Objective The 2019 EAU guidelines for male infertility suggest performing CFTR gene screening during infertility work-up if semen volume is <1.5 ml. We evaluated sensibility, specificity and predictive accuracy (PA) of the current EAU guidelines cut-off based on semen volume in comparison with a different cut-off based on sperm concentration values in order to more reliably identifying CFTR gene alteration(s) in a homogenous cohort of white-European men presenting for couple's infertility

Materials and Methods 1037 infertile men were analyzed. EAU guidelines for CFTR gene alterations testing (semen volume <1.5 ml as for WHO criteria) were firstly adopted in our cohort; thus, the predictive performance and accuracy of different sperm concentration cut-offs (5M/ml vs. 4M/ml vs. 3M/ml vs. 2M/ml vs. 1M/ml for

CFTR deletion and 15M/ml vs 10M/ml vs. 5M/ml vs. 4M/ml vs. 3M/ml vs. 2M/ml vs. 1M/ml for CFTR polymorphisms) were tested. Youden's index calculation and AUC were used to identify the best cut-off for sperm concentration

Results Of 1037, 151 (14.5%) patients had semen volume <1.5 ml and would have deserved CFTR testing according to EAU guidelines; of 151, 4 (0.3%) actually displayed a CFRT mutation. Conversely, of 1037, 150 (14.5%) patients displayed a CFTR polymorphism. Overall predictive accuracy (PA), sensibility, specificity, FPR and AUC of EAU guidelines were 86.8%, 50%, 86.9%, 13% and 68% for CFTR mutations and 77.6%, 22.6%, 86.9%, 13%, 54% for CFTR polymorphisms. As for CFTR mutations, 535 (51.5%) patients had sperm concentration < 5M/ml. Lowering the cut-off of 1M/ml each step (5M/ml vs. 4M/ml vs. 3M/ml vs. 2M/ml vs. 1M/ml), the model performance was kept, compared to EAU guidelines (AUC: 61.9% vs. 63.7% vs. 65.1% vs. 67.2% vs. 69.8%).

The Youden's index increased at decreasing sperm concentration, with its maximum in the case of sperm concentration <1M/ml (39.7). Likewise, as for CFTR polymorphisms the model performance was comparable (AUC: 51.9% vs. 52.2% vs. 51.5% vs. 51.8% vs. 51.9% vs. 51% vs. 49.9%). Youden's index for CFTR polymorphisms was maximum in the case of sperm concentration <10M/ml (4.3)

Conclusions EAU guidelines depicts a good performance in identifying CFTR deletion and polymorphisms. However, given the greater prevalence of a reduced sperm concentration compared to a reduced semen volume in the everyday clinical practice, this newly suggested cut-off appears to be more applicable while maintaining the same performance.

Lo studio ha avuto finanziamenti: No

Codice: **C04**

IMPLANTATION OF ZSI 475 FTM INFLATABLE PENILE PROSTHESIS INSERTION IN TRANSGENDER MEN: PRELIMINARY RESULTS OF A FEASIBILITY STUDY

Marco Falcone, Mirko Preto, Lorenzo Bertolino, Massimiliano Timpano, Ceruti Carlo, Omidreza Sedigh, Paolo Gontero

AOU Città della Salute e della Scienza - S.C. Urologia

Introduction and aim Many transgender men desire a penile prosthesis (PP) implantation to engage in penetrative sexual intercourse after a phalloplasty. This procedure still represents a real challenge for the reconstructive surgeon. The ZSI 475 FTM is a PP that has recently been specifically designed for phalloplasty. Our aim is to assess the preliminary outcomes of ZSI 475 FTM PP implantation after total phallic reconstruction in the context of a genital gender affirming surgery (GGAS).

Materials and methods We conducted a retrospective single-center analysis of 5 consecutive patients. The recruitment period was April 2019 to February 2020. A total of 5 ZSI 474 FTM were implanted. A right groin incision was carried out. The incision was deepened to the pubic bone and all subcutaneous tissues retracted medially to expose the central aspect of the pubic symphysis. For prosthesis anchorage 4 J-needle 0 Polyester (Ethibond™) sutures were inserted into the pubic bone in 2 parallel rows approximately 2 cm apart from each other's. The neophallus was dilated with Hegar dilators up to size 20, to create enough space to house the cylinder. The phallic length was measured from its tip to the pubis and the size of cylinder chosen accordingly. The proximal ad-hoc created plaque of the implant was anchored to the pubic bone through the periosteum stitches. The reservoir was positioned in the extraperitoneal space trough an additional abdominal counter incision. The pump was positioned in the right scrotum after the creation of a dartoic pouch. The outcomes measured were intraoperative and postoperative complications and eventual need for revision surgery. Patient satisfaction rates were extrapolated from administered non-validated questionnaires.

Results The median follow-up was 7 months. No intraoperative complications occurred. Device infection did not occur in the present series. Additionally, none of the patients required surgery. In all, 100% of patients were satisfied with

the result, although only 80% used their device for sexual intercourse. 80% of patients found easy to inflate and deflate the device. 60% of patients managed to reach an orgasm in the course of a penetrative sex intercourse.

Conclusions Despite the limited follow-up and number of cases, the implantation of ZSI 475 FTM PP into a neophallus is a safe procedure, yielding to decent satisfaction rates. Long-term studies are warranted to assess the reliability of this device in the context of a GGAS.

Lo studio ha avuto finanziamenti: No

Codice: **C05**

PREDICTIVE FACTORS FOR THE EFFICACY OF THE LOW INTENSITY EXTRACORPOREAL SHOCK WAVE THERAPY (LI ESWT) TO IMPROVE ERECTILE DYSFUNCTION: A PROSPECTIVE STUDY

Luigi Quaresima¹, Angelo Marronaro¹, Daniele Mazzaferro¹, Andrea Cicconofri², Rocco Delle Fave², Eugenio Pretore², Enrico Caraceni¹

¹ UOC Urologia Civitanova Marche, AV 3, ASUR Marche

² Clinica Urologica Ospedali Riuniti Torrette di Ancona, UNIVPM

Introduction Low Intensity Extracorporeal Shock Wave Therapy (LI-ESWT) has been used for some years for the treatment of Erectile Dysfunction (ED): in particular, the EAU guidelines provide it for the treatment of mild ED or for patients who are poorly responsive to oral therapy. Unfortunately, therapy with LI-ESWT, which consists of a cycle of treatments of at least 10 sessions, whose costs is at patient's charge, is burdened by a failure rate that is far from negligible. The purpose of our work is to identify the factors that predispose to the response of LI-ESWT.

Materials and methods 105 patients with mild to moderate ED were treated from February 2018 to February 2020. All patients were stratified by age, BMI (normal weight, overweight, obese) and comorbidities (smoking, compensated or decompensated diabetes mellitus, compensated or decompensated hypertension) and were evaluated before and 2 weeks after the end of the course of treatment with questionnaire International Index of Erectile Function short version (IIEF-5). The study excluded patients who had previously performed unsuccessful drug therapy. Patients with iatrogenic or post trauma ED were also excluded. The patients underwent a cycle of 10 sessions of focal LI ESWT with electro-pneumatic device with 1.1 Bar pressure with 4000 strokes per session with 4 Hz frequency.

Results A total of 92 patients with an average age of 63 years (47-76) and an average pre-treatment IIEF 5 of 18/25 (16-21 / 25) met the study criteria. Of these, 82 have completed the treatment cycle and follow up. Among them, 65% of the patients showed an increase in the questionnaire score: these patients with an average pre-treatment IIEF 5 of 19/25, had an average post-treatment IIEF 5 of 22/25. Percentage of patients with a valid erection recovery were 61%. This percentage was lower in the subcategories of obese patients, smokers, in polytherapy, with diabetes not well compensated, with hypertension not well controlled with percentages of 52, 54, 55, 51 and 54% respectively ($P < 0,05$).

No association was found with age, overweight, compensated diabetes or hypertension ($P < 0,05$).

Conclusions Age, overweight (not obesity), well-controlled diabetes or hypertension do not affect the recovery of a valid erection with the LI ESWT treatment.

On the contrary, smokers or patients with diabetes or poorly controlled hypertension or with obesity show a less than average response to treatment and should be directed towards other therapy

Lo studio ha avuto finanziamenti: No

Codice: **C06**

RATE OF HYPOGONADISM AMONG KLINEFELTER PATIENTS AT FIRST PRESENTATION: A MULTICENTER CROSS-SECTIONAL STUDY

Luca Boeri^{1,2}, Franco Palmisano¹, Matteo Turetti¹, Francesco Botticelli¹, Paolo Capogrosso², Eugenio Ventimiglia², Mirko Preto³, Mattia Sibona³, Alessandro Franceschelli⁴, Giorgio Gentile⁴, Marco Falcone³,

Massimiliano Timpano³, Carlo Ceruti³, Franco Gadda¹, Fulvio Colombo⁴, Luigi Rolle³, Paolo Gontero³, Josvany Sánchez-Curbelo⁵, Emanuele Montanari¹, Francesco Montorsi², Andrea Salonia²

1 Department of Urology, Foundation IRCCS Ca' Granda – Ospedale Maggiore Policlinico, University of Milan, Milan, Italy

2 Division of Experimental Oncology/Unit of Urology; URI; IRCCS Ospedale San Raffaele, Milan, Italy

3 Division of Urology; A.O.U. Città della Salute e della Scienza di Torino - Presidio Molinette; Turin; Italy

4 Andrology Unit, University Hospital S. Orsola, Bologna, Italy

5 Fundació Puigvert, Department of Andrology, Universitat Autònoma de Barcelona, Barcelona, Spain

Introduction&objectives Adult patients with Klinefelter syndrome (KS)

are characterized by loss of testicular germ cells, hyalinization of testicular tubules, degeneration of Sertoli cells, and hyperplasia of Leydig cells, eventually resulting in testicular volume loss and a decrease in serum testosterone levels. The actual rate of hypogonadism in adult KS patients is unknown.

We aimed to assess the prevalence of different forms of hypogonadism in a cohort of KS patients at first assessment in the real-life setting.

Methods Clinical and laboratory data of 103

KS azoospermic men who underwent testicular sperm extraction (TESE) between 2008 and 2019 at 5 tertiary referral centers were analyzed. Comorbidities were scored with the Charlson Comorbidity Index (CCI). Patients were categorized into 4 groups of hypogonadism: eugonadism [normal total testosterone (tT) (≥ 3.03 ng/mL) and normal LH (≤ 9.4 mUI/mL)], secondary hypogonadism [low tT (≤ 3.03 ng/mL) and low/normal LH (≤ 9.4 mUI/mL)], primary hypogonadism [low tT (≤ 3.03 ng/mL) and elevated LH (≥ 9.4 mUI/mL)] and compensated hypogonadism [normal tT (≥ 3.03 ng/mL) and elevated LH (≥ 9.4 mUI/mL)]. None of patients had testosterone replacement therapy at the time of evaluation. Descriptive statistics tested the association between clinical characteristics and laboratory values among the 4 groups.

Results Median (IQR) patients age was 32 (24, 37) years. Baseline serum FSH and tT levels were 29.5 (19.9, 40.9) mUI/mL and 3.8 (2.5, 11.0) ng/mL, respectively. Sperm retrieval rate at TESE was 21.4% (22 patients); of 22, 15 (68.2%) patients underwent ART and 5 (22.7%) ended in live birth children. Eugonadism, primary hypogonadism and compensated hypogonadism were found in 16 (15.6%), 34 (33.0%) and 53 (51.4%) men, respectively. As expected, none had secondary hypogonadism. Patients' age, BMI, CCI, FSH levels and positive sperm retrieval rate were comparable among groups. Testicular volume was lower in patients with primary hypogonadism than eugonadal (3.1 vs. 5.6 ml; $p=0.01$) and men with compensated hypogonadism (3.1 vs. 5.0 ml; $p=0.02$). Testicular volume was similar between eugonadal and patients with compensated hypogonadism.

Conclusions Findings from this cross-sectional study showed that 15.6% of adult KS men have normal tT values at presentation in the real-life setting.

Most KS patients presented with compensated hypogonadism, and normal tT levels.

Sperm retrieval rates were not associated with hypogonadism category

Lo studio ha avuto finanziamenti: No

Codice: **C07**

PREDICTORS OF FSH TREATMENT EFFICACY IN MEN

WITH IDIOPATIC NONOBSTRUCTIVE INFERTILITY: A TRIFECTA ANALYSIS

Carlo Maretti, **Riccardo Lombardo**, Egidio Andriani, Nicola Arrighi, Giovanni Beretta, Bruno Bianchi, Domenico Canale, Maurizio Carrino, Mirco Castiglioni, Fulvio Colombo, Antonio Corvasce, Cosimo De Nunzio, Aldo Di Filippo, Andrea Fabiana, Marco Fasbender Jacobitti, Vincenzo Favilla, Alessandro Franceschelli, Antonio Raffaele Granata, Antonio Maria Granata, Michele Guidotti, Emilio Italiano, Pierluigi Izzo, Maurizio Mercenario,

Edoardo Pescatori, Giorgio Piubello, Pietro Salacone, Giuseppe Sidoti, Marcello Soli, Rosario Tammaro, Paolo Turchi, Gianni Ughi, Daniele Vecchio, Mario Vetri, Giorgio Franco, The Winner collaborative group.

Società Italiana di Andrologia – SIA

Background In the past years, some studies have evaluated the efficacy of FSH treatment in patients with idiopathic non-obstructive infertility. Aim of our study was to evaluate possible predictors of successful treatment in patients with idiopathic nonobstructive infertility.

Methods A consecutive series of patients referring to the fertility clinic with idiopathic nonobstructive infertility were consecutively enrolled in 12 centers. All patients underwent detailed medical history, physical examination, semen analysis and serum levels of LH,FSH, testosterone and estradiol. Inclusion criteria included FSH < 8 UI/ml and at least one abnormality on semen analysis. All patients underwent treatment with FSH 150 UI 3 times a week for 3 months.

At three months patients underwent semen analysis. Successful trifecta treatment was defined as successful improvement of sperm concentration, progressive motility and typical morphology. Improvements were defined as follows.

- Sperm Concentration >15 Mil/ml and/or 100% improvement in sperm concentration
- Progressive Motility >32% and/or 100% improvement in progressive motility
- Typical Morphology >4 % and/or 100% improvement in typical morphology

Results Overall 250 patients were prospectively enrolled with a median age of 35 (31/38) years, median BMI of 31 (27/34) kg/m², median testicular volume of 16 (13/20) ml and median testosterone levels of 5 (4/6) ng/ml. Overall, after FSH treatment 57% of the patients improved sperm concentration, 51% improved progressive motility and 65% improved typical morphology. Overall 85% of the patients improved at least one parameter and 36% achieved the trifecta outcome. Uni and multivariate analysis for different outcomes are listed in table 1. BMI was an independent predictor of concentration and progressive motility improvement. On multivariate analysis Age (OR:0,94: 95%CI:0,89-0,99; p=0,049), Semen Volume (OR:0,74: 95%CI:0,57-0,99; p=0,044) and pre-treatment typical morphology (OR:1,08: 95%CI:1,04-1,12; p=0,001) were independent predictors of trifecta outcome.

Conclusions FSH treatment is effective in treating patients with non obstructive infertility. Overall 85 % of the patients improved at least one parameter and 35% achieved a trifecta. Younger age, higher pretreatment spermatic volume and higher typical morphology were independent predictors of a successful trifecta.

Lo studio ha avuto finanziamenti: No

Codice: **C08**

BLOOD PLASMA MIR-20A-5P EXPRESSION AS A POTENTIAL NON-INVASIVE DIAGNOSTIC BIOMARKER IN PATIENTS WITH NON-OBSTRUCTIVE AZOOSPERMIA

Gianmartin Cito¹, Pamela Pinzani², Rossella Fucci³, Rita Picone³, Francesca Salvianti², Claudia Giachini³, Patrizia Falcone³, Elisabetta Micelli³, Andrea Cocci¹, Pierangelo Verrienti¹, Andrea Minervini¹, Marco Carini¹, M.E. Coccia³, Alessandro Natali¹

¹ Careggi Hospital- University of Florence, Dept. of Urology, Florence, Italy.

² Careggi Hospital- University of Florence, Molecular and Clinical Biochemistry Unit, Florence, Italy.

³ Careggi Hospital- University of Florence, ARTs Center, Florence, Italy.

Introduction and objectives Recently, alterations in the expression of specific microRNAs in semen have been linked to altered spermatogenesis suggesting their expression could be used as potential infertility biomarkers and explain the molecular mechanisms underlying the altered spermatoge

nesis. The objective of the study is to evaluate the blood plasma miR-20a-5p expression in infertile patients with non-obstructive azoospermia (NOA) compared to healthy normozoospermic men.

Materials and methods From January 2018 to December 2019, 24 infertile couples were prospectively enrolled. All the patients were included into two groups: Group 1 infertile men with NOA, Group 2 healthy normozoospermic men belonging to couples with female infertility tubal factor who achieved pregnancy using IVF or ICSI. The expression of circulating miR-20a-5p was assessed by RT qPCR in plasma samples. A relative quantification strategy was adopted using the $2^{-\Delta\Delta C_q}$ method to calculate the target miR-20a-5p expression with respect to miR-16-5p as endogenous control. Total cell-free RNA extracted from 0.5 ml plasma using the mirVana PARIS kit was submitted to RT-qPCR using TaqMan Advanced miRNA cDNA Synthesis Kit and TaqMan® Advanced miRNA Assays.

Results Group 1 included 14 patients, Group 2 10 men. Mean male age was 35.6 ± 4.2 years. Considering the Group 1, mean FSH value was 19.4 ± 7.8 IU/l, LH 8.5 ± 3.4 IU/l, TT 12.5 ± 3.9 nmol/l, TSH 2.0 ± 1.1 mIU/l, PRL 10.5 ± 3.2 ng/ml. Mean right and left testicular volume (TV) was 8.9 ± 5.2 ml and 8.2 ± 4.5 ml, respectively. Group 2 showed hormonal levels and TV in the normal range. All NOA underwent testicular sperm extraction. Successful sperm retrieval (SR) with cryopreservation was found in 8/14 patients (overall SR rate: 57.1%). Mean sperm concentration was $0.001 \pm 0.0001 \times 10^6$ /ml, motility 0.2 ± 0.6 %, biosystem straws collected 3.2 ± 2.0 . Mean miR-20a-5p value was 0.25 ± 0.20 and 0.06 ± 0.02 in the Group 1 and Group 2, respectively. Thus, the relative expression of miR-20a-5p was significantly higher in patients affected by NOA than in healthy normozoospermic control subjects ($p=0.026$).

Conclusions Blood plasma miR-20a-5p could represent a potential non-invasive diagnostic biomarker in infertile patients with non-obstructive azoospermia. A possible correlation of this marker with testicular histopathological findings could allow the clinician to correctly counsel the azoospermic patients in performing surgery for fertility purpose.

Lo studio ha avuto finanziamenti: No

Codice: **C09**

NEW DRUG THERAPY FOR DELAYED EJACULATION: THE BIRTH OF CAMARUF 0.006%

Youssef Ben Maarouf¹, Cristina Amato², Ferruccio Balducci¹, Carlo Bettocchi³, Andrea Cocci⁴, Gianmartin Cito⁴, Mauro Gacci⁴, Sergio Serni⁴, Alessandro Natali⁴, Daniel Giunti⁵, Andrea Olmi⁵, Guido Barbagli⁶, Alessandro Picinotti⁷, **Pier Andrea Della Camera**⁷

¹ Balducci pharmaceutical laboratories, Calenzano, Florence, Italy

² Study Nurse, AOUC, Careggi, Florence, Italy

³ Urology, Andrology and Kidney Transplantation Unit, Department of Emergency and Organ Transplantation, University of Bari, Italy.

⁴ Department of Urology and Andrology Aouc, Careggi, Florence, Italy

⁵ Sexuologist, "Il Ponte" center, Florence, Italy

⁶ International Center for Reconstructive Urethral Surgery, Arezzo,

⁷ Department of Urology and Andrology, Centro Chirurgico Toscano, Arezzo, Italy

Introduction Delayed ejaculation (D.E.) is probably the less studied male sexual dysfunction but is not a such rare disorder with a prevalence of 15- 30% in the higher groups. Current treatments have only an anecdotal success or important side effects, so often patient starts only a psychosexual therapy without unrealistic results

Material and methods Camarouf is an oleoresin-based cream with capsaicin and vanilloid that has the ability to stimulate the penile nerve endings and determine an increase in the penile blood flow giving an increase in the sensation of heat.

After signing a specific informed consent from June 2018

to October 2019, we recruited 54 patients with D.E.. Patients performed a

preventive sexological, urological and hormonal evaluation to rule out such an etiology. Only 48 patients were eligible for the study and they were randomized into two study groups of 24 patients: A groups start with Camarouf cream and B that use a placebo oleoresin-based ones. With Topiclick® the dose was standardized at 0.25ml / week, 15 min before sexual intercourse. After 2 months of therapy and 1 months of wash out, groups reversed treatment. IIEF

5 questionnaire, Quol questionnaire and IELTS were administered at 2, 3 and 7 months. T student test was used to compare IELTS and Δ mean IELTS (between treatment and wash out period) among two groups. Statistical analysis was performed with MEDCALC (Software, Ostend, Belgium)

Results At 2 months of therapy group A showed a statistically difference in Δ mean IELTS, IELTS and Quol compared with group B ($p < 0,0001$) and the same was recorded by the group B at 7 months.

No IELTS statistical differences was recorded in wash out period by two groups. IIEF

5 questionnaire showed no differences at 2, 3 and 7 months ($p = 0,654$; $p = 0,234$; $p = 0,544$). Only 1 patient stopped therapy for severe penile burning, and 5 patients used cream every 2 weeks for bothersome penile inflammation.

Conclusion Camarouf 0,006% has been shown to improve IELTS with a good patient safety and compliance profile.

The cream does not improve or worsen penile hardness during sexual intercourse and has not been shown to have a healing role after two months of therapy.

Lo studio ha avuto finanziamenti: No

Codice: **C10**

NOT ALL INFERTILE MEN HAVE THE SAME RISK OF IMPAIRED GENERAL HEALTH STATUS: TOWARDS A TAILORED RISK-ADAPTED DIAGNOSTIC AND FOLLOW-UP STRATEGY

Eugenio Ventimiglia¹, Paolo Capogrosso¹, Walter Cazzaniga¹, Luca Boeri^{1,2}, Edoardo Pozzi¹, Federico Belladelli¹, Nicolò Schifano¹, **Luigi Candela**¹, Rayan Matloob¹, Massimo Alfano¹, Costantino Abate¹, Vincenzo Mirone³, Francesco Montorsi¹, Andrea Salonia¹

1. Division of Experimental Oncology/Unit of Urology; URI; IRCCS San Raffaele Scientific Institute, Milan, Italy

2. Department of Urology, Foundation IRCCS Ca' Granda – Ospedale Maggiore Policlinico, University of Milan, Milan, Italy

3. Urology Unit, University "Federico II", Naples, Italy

Introduction & objectives Men with male factor infertility (MFI) have an increased risk of developing comorbid diseases during their lifetime compared to the general population, although a biological explanation for this observation is still lacking. Moreover, it is not clear whether this risk is equally shared among infertile men. Therefore, we lack criteria to identify those men actually at higher risk of decreased general health status. We aimed to identify MFI-specific factors related to impaired general health focusing on MFI causes, since they represent an appraisal of both MFI and systemic status.

Methods We collected complete clinical and demographic data of 1768 primary infertile men. Comorbidities were categorized with the Charlson Comorbidity index (CCI). Six different causal categories for MFI (genetic abnormalities, cryptorchidism, obstructive causes, hypogonadism, varicocele, and other causes) were established. Odds ratios (ORs) and 95% CIs for the association between causal categories and presence of comorbidities ($CCI > 0$) have been estimated, adjusting for possible confounding variables (age; educational status).

Results Median (IQR) age of the study cohort was 37 (33, 41) years. Of all, comorbidities ($CCI > 0$) were found in 117 (7%) patients. The most commonly identified cause for MFI was hypogonadism (any type) (655, 37%), whereas 367 (21%) men had idiopathic MFI. Men with comorbidities were older (age: 40 (36, 45) vs. 37 (34, 40) in the and more frequently azoospermic (35% vs. 24%) compared to men with $CCI = 0$. Causes with a potential systemic action, such as genetic abnormalities and hypogonadism, were more prevalent in men with comorbidities vs. those without comorbidities (7% vs. 5% for genetic factors, and 47% vs. 36% for hypogonadism), whereas local ones were more frequent in healthy men (e.g. varicocele, 28% vs. 13%). Genetic causes (OR 3.16; 95% CIs: 1.27, 7.91) and hypogonadism (OR 2.38: 1.29, 4.40) were positively associated with the presence of comorbidities. Men with varicocele had a similar risk to men with idiopathic infertility (OR 0.67: 0.35, 1.31).

Conclusions Findings from this cross-sectional study showed that specific causes of MFI, especially systemic ones, are associated with decreased general health status.

In this context, patients with genetic abnormalities and hypogonadism should be more carefully followed-up due to their very high risk of developing comorbid diseases.

Lo studio ha avuto finanziamenti: No

Codice: **C11**

FUNCTIONAL AND PATIENT'S REPORTED OUTCOMES AFTER TOTAL GLANS RESURFACING: RESULTS FROM A RETROSPECTIVE ANALYSIS IN A TERTIARY REFERRAL NETWORK

Marco Falcone, Mirko Preto, Lorenzo Bertolino, Massimiliano Timpano, Ceruti Carlo, Omidreza Sedigh, Paolo Gontero

AOU Città della Salute e della Scienza - S.C. Urologia

Introduction Strong evidences on organ preserving surgery to address penile benign or malignant lesions are still lacking. Particularly, functional outcomes and patients' reported outcomes (PRO's) have been rarely investigated.

Objective The aim of our study is to report functional outcomes and PRO's of total glans resurfacing (TGS) in a consecutive series of patients with lichen sclerosus (LS) or localized penile cancer (PC).

Methods From 2004 to 2018 a consecutive series of patients underwent a TGS in a tertiary referral network. A retrospective analysis was conducted extrapolating data from the clinical records.

Urinary and sexual outcomes were investigated through the IIEF and IPSS validated questionnaires.

PRO's were extrapolated from a 5-item "ad hoc" created questionnaire administered through a telephone interview at 1 year follow-up. Statistical analysis was conducted with Stata 12.

Results 37 consecutive patients were enrolled in the present study. 11 patients showed a LS at the final histopathological examination, whereas a localized PC was detected in the remainders. The validated questionnaires assessed that neither urinary or sexual function deteriorated after surgery. An overall improvement of the quality of life was reported by 86.4% of patients. Glans sensitivity was fully maintained in 89.2% of cases. 94.5% of patients reported to be fully satisfied by the aesthetic appearance of the penis and would consider to undergo the same procedure again if necessary. 91.9% of patients would recommend the same procedure to someone else.

Conclusions TGS represents an excellent surgical option ensuring a satisfactory penile function and appearance. We should rely on TGS to manage selected cases of benign or malignant penile lesions.

Lo studio ha avuto finanziamenti: No

Codice: **C12**

LONG-TERM OUTCOMES OF SIMULTANEOUS CURVATURE CORRECTION AT THE TIME OF THE PENILE FRACTURE REPAIR

Lucio Dell'Atti, Simone Scarcella, Piero Ronchi, Camilla Capretti, Lorenzo Montesi, Massimo Polito, Andrea Benedetto Galosi

Clinica Urologica, Azienda Ospedaliero-Universitaria "Ospedali Riuniti" di Ancona.

Introduction Penile fracture (PF) require an early surgical exploration, and defect closure of the lesions are recommended to prevent long-term complications. However, post-operative unsatisfactory penile curvatures are frequent in literature. In this study, we wished to present long-

term outcomes of PF after surgical repair approach with a simultaneous intraoperative curvature (ic) correction via tunical plication (tp).

Materials & methods 45 men operated for PF throughout a 11-year period. All patients (pts) had singular tear of the corpora cavernosa (cc). All surgical explorations were performed within 12 hours after the traumatic event. The size of the tear ranged between 8 and 20 mm in length. The tunica defect was closed by a double-layered technique with absorbable 2-0 polydioxanone. In pts that had required to correct a cc deviation a tp was then performed to straighten the tunica angulations in all pts with curvature greater than 30°, using 2 to 3 pairs of a 2-0 absorbable suture through the full thickness of the tunica albuginea. All pts were called for a semi-structured interview that identified 4 domains: penile appearance (PA), penile sensory (PS), erectile function (EF), sexual relationships and generic quality of life (GQoL).

Results 39 pts (87.7%) agreed to participate. 28 pts (28/45, 71.8%), with an ic greater than 30°, were corrected (Group A: GA). The only correction of PF was achieved in 28% of the cases (11/39), (Group B: GB). Median time from the intervention to the interview was 44 months (6-132). Mean age of pts was 51.2 years (26-74). According to the answers 10.7% pts of GA and 9.1% of GB complained of suture-related complications as unpleasant feeling of bumps under the skin; in 2.7% and 9.1% pain was present during erection, respectively in GA and GB. 3 pts (10.7%) in GA and 4 pts (36.4%, $p<0.001$) in GB declared some degree of postoperative ED, while all pts in GA were able to complete sexual intercourse vs. 63.3%(7/11, $p<0.002$) of GB. A significant difference ($p<0.001$) was noticed in terms of subjective improvement in penile deformity between pts in GA (73.1%) and GB (42.1%). Also, postoperative sensory changes were significantly more prevalent ($p<0.001$) among GA pts (21.4%) compared to GB (9.1%).

Conclusion Our long-term results support that a simultaneous plication technique as correction after a PF, if needed, provides certain advantages in terms of PA, EF and GQoL post operatively, but not in PS.

Lo studio ha avuto finanziamenti: No

Codice: **C13**

IDENTIFICATION OF EARLY SIGNS OF RESPONSE TO THERAPY DURING CYCLE WITH LOW INTENSITY EXTRACORPOREAL SHOCK WAVE THERAPY

Luigi Quaresima¹, Angelo Marronaro¹, Daniele Mazzaferro¹, Andrea Cicconofri², Rocco Delle Fave², Eugenio Pretore², Enrico Caraceni¹

¹ UOC Urologia Civitanova Marche, AV 3, ASUR Marche

² Clinica Urologica Ospedali Riuniti Torrette di Ancona, UNIVPM

Introduction Low Intensity Extracorporeal Shock Wave Therapy (LI-ESWT) has been used for the treatment of Erectile Dysfunction (ED) for some years: in particular, the EAU guidelines provide it for the treatment of mild ED or for patients who are poorly responsive to oral therapy (OT). Unfortunately, therapy with LI-ESWT, which consists of a cycle of treatments of at least 10 sessions, whose costs is at patient's charge, is burdened by a failure rate that is far from negligible. The purpose of our work is to identify early signs of response to therapy during the LI-ESWT cycle that can predict the recovery of the erection.

Materials & methods from February 2018 to February 2020 all patients with mild to moderate ED treated with LI-ESWT and taking OT twice a week at the same time have been recruited into the study; patients were assessed before (time 0), after 5 treatments (time 1) and 2 weeks after the end of the therapy cycle (time 2) with the International Index of Erectile Function short version (IIEF-5) questionnaire; It was also asked at time 1 if they had improved their Spontaneous Nocturnal Erection (SNE) and decreased OT dose for ED administered for adjuvant purposes and to allow adequate sexual intercourse. The study excluded patients who had previously performed unsuccessful OT. Patients underwent a cycle of 10 sessions of LI-ESWT focal weekly with electro-pneumatic device with 1.1 Bar pressure with 4000 strokes per session with 4 Hz

frequency.

Results 105 patients with an average age of 64 years (47-76) and with an average pre-treatment IIEF 5 of 18/25 (16-21 / 25) met the study criteria. Of these, 95 have completed the treatment cycle and follow up.

The patients who showed an increase in the questionnaire score at time 1 were 15 (16%); at time 2 they were 60 (63%). At time 1 patients who showed improvement of SNE were 70 (74%); of these, 55 (79%) had an improvement to IIEF-5 performed at time 2. Patients who at time 1 reduced the dose of OT while maintaining a valid erection were 58 (61%); of these, 51 (88%) had an improvement of the IIEF-5 performed in time 2.

Conclusion The appearance or improvement of the SNE and the reduction of the dose of OT were found to be early signs of response to LI-ESWT therapy for the recovery of a valid erection unlike the IIEF-5 questionnaire. This has numerous advantages, in particular the possibility of identifying non-responder patients so as to suspend the cycle early and move towards other therapy.

Lo studio ha avuto finanziamenti: No

Codice: **C14**

REPRODUCTIVE OUTCOMES IN INFERTILE MEN WITH SPINAL CORD INJURY (SCI): A RETROSPECTIVE CASE-CONTROL ANALYSIS

Gianmartin Cito¹, Maria Elisabetta Coccia², Rossella Fucci², Rita Picone², Giulio Del Popolo³, Andrea Cocci¹, Luca Gemma¹, Giuseppe Lombardi³, Elisabetta Micelli², Sergio Serni¹, Lorenzo Masieri¹, Andrea Minervini¹, Marco Carini¹, Alessandro Natali¹

¹Careggi Hospital- Azienda Ospedaliera Universitaria Careggi- Florence, Department of Urology, Florence, Italy.

²Careggi Hospital- Azienda Ospedaliera Universitaria Careggi- Florence, ART Center, Florence, Italy.

³Careggi Hospital- Azienda Ospedaliera Universitaria Careggi- Florence, Department of Neuro-Urology, Florence, Italy.

Introduction and objectives Spinal cord injury (SCI) has an incidence of 16 million/year in Western Europe and may affect males in reproductive age. If it occurs when parental goals have not been met, fertility issue is one of the major consequences of SCI.

Our aim is to evaluate the semen characteristics and

the reproductive outcomes after assisted ejaculation methods with fresh IVF/ICSI cycles in patients suffering from SCI.

Materials and methods From 2010 to 2019, all the couples referring to our ARTs Centre with male infertility factor due to SCI were retrospectively collected. The SCI group was compared to a control group, composed of couples with idiopathic male infertility (non-SCI group). Patients firstly underwent penile vibratory stimulation (PVS), as the first-line method used to obtain ejaculation, except for medullary lesions at or below T10. Men with SCI who are “non-responders” to PVS underwent electroejaculation (EEJ). When persistent anejaculation with the first two methods occurred, testicular sperm aspiration was proposed.

Results This monocentre case-control study included 193 couples: 53 in SCI group and 140 in non-SCI group. 210 fresh IVF/ICSI cycles were performed. Mean paternal age in the SCI and the non-SCI group was 39.2 ± 6.5 and 36.6 ± 5.7 years, respectively. Median semen volume of SCI was significantly lower, compared to non-SCI (1.5 ml vs. 3.1 ml; $p < 0.01$). Median sperm concentration/ml and total sperm count was considerably higher in SCI. Mean sperm progressive motility was significantly lower in SCI (5.0 % vs. 35.0 %; $p < 0.01$). Normal fertilization rate (FR) was significantly lower in SCI (46.0% vs. 71.0%; $p < 0.01$). Total FR was 50.0% and 75%, respectively, in SCI and non-SCI group. A trend toward higher pregnancy rates per cycle was found in non-SCI (31.4 % vs. 21.4%), or in the live birth rate, which was 27.1% and 20.0%, respectively.

No significant differences were found in pregnancy, miscarriage and live birth rates per cycle, between the two groups.

Conclusions The assisted ejaculation methods proved to be efficacious and safe. As regards the reproductive outcomes, no significant differences were found among different techniques. Overall, since the sperm of men with SCI appears to have reduced fertility potential, pregnancy and live birth rates were similar to non-SCI

patients suffering from male factor infertility. Thus, SCI men have the same opportunity to father biological children, compared to men without SCI.

Lo studio ha avuto finanziamenti: No

Codice: **C15**

DUAL IMPLANTATION OF PENILE PROSTHESIS AND ATOMS SYSTEM FOR POST-PROSTATECTOMY ERECTILE DYSFUNCTION AND URINARY INCONTINENCE: A FEASIBILITY STUDY

Marco Falcone¹, Mirko Preto¹, Lorenzo Bertolino¹, Massimiliano Timpano¹, Ceruti Carlo¹, Omidreza Sedigh¹, Alessandro Giammò², Paolo Gontero¹

¹ AOU Città della Salute e della Scienza - S.C. Urologia

² AOU Città della Salute e della Scienza - S.C. Neurourologia

Introduction and aim Erectile dysfunction (ED) and stress urinary incontinence (SUI) are common after a radical prostatectomy (RP). The management of patients affected by both remains challenging. Selected patients may be candidate to a dual implantation of a continence device and a penile prosthesis (PP). The ATOMS system has recently proven to be an effective solution for SUI. Dual implantation of a PP and ATOMS system has never been described so far. Our aim is to evaluate feasibility and safety of this combination treatment.

Materials and methods From 2017 to 2019, 5 patients underwent a dual implantation of a PP and ATOMS system in a single referral center. Inclusion criteria was the concomitant presence of a medically refractory ED and a mild to severe SUI as a consequence of a RP. Patients were referred to our center ≥ 12 months after the RP and all of them failed conservative options. All the procedures were performed by the same surgeons' team, and were conducted through a peno-scrotal and perineal incision. Descriptive features and surgical outcomes were retrospectively extrapolated from the clinical records. Operative time, intra and post-operative complications, postoperative pain at 6, 24, 48 hours after the procedure and hospital stay were selected as surgical outcomes.

Results The median age was 65 years. All patients had previously undergone a RP. 3 underwent a deferred implantation, 2 underwent a simultaneous procedure. 3 patients underwent a malleable PP implantation, whereas a 3-pieces was implanted in the remainders. The median operative time was 140 min in case of a simultaneous implantation and 165 min in case of a deferred one. No major complications were reported. A single case of a scrotal hematoma managed conservatively was recorded. VAS values at 6, 24 and 48 hours were 4, 4, 3 respectively. The median hospital stay was 3 days. After a median follow-up of 8 months, all the devices are well-functioning, no chronic pain was reported, no late complications occurred and to date none of the devices was explanted.

Conclusions Despite the low number of cases in our series, the surgical outcomes of the combined implantation are satisfactory, with an inconspicuous incidence of complications. The dual implantation of PP and ATOMS system may represent a realistic solution for patients requiring to solve a concomitant end-stage ED and SUI after RP, either in a single-stage or a deferred procedure.

Lo studio ha avuto finanziamenti: No

Codice: **C16**

EFFICACY OF COLLAGENASE CLOSTRIDIUM HISTOLYTICUM (CCH) IN PATIENTS WITH ACUTE PHASE OF PEYRONIE'S DISEASE

Andrea Cocci¹, Fabrizio di Maida¹, Paolo Capogrosso³, Lotti Francesco⁴, Michele Rizzo⁵, Marina Di Mauro², Andrea Salonia³, Gianmartin Cito¹, Marco Falcone⁶, Andrea Romano¹, Gaia Polloni⁷, Juan

Ignacio Martínez Salamanca⁸, Fernández-Pascual Esaú⁸, Andrea Minervini¹, **Nicola Mondaini**⁹, Giorgio Ivan Russo²

¹Department of Surgery, Urology section, University of Firenze, Firenze, Italy

² Department of Surgery, Urology section, University of Catania, Catania, Italy

³Division of Experimental Oncology/Unit of Urology, Urological Research Institute, IRCCS Ospedale San Raffaele, Milan, Italy.

⁴Department of Experimental and Clinical Biomedical Sciences, University of Florence, Florence, Italy.

⁵ Department of Urology, University of Trieste, Trieste, Italy.

⁶ Urology Clinic, A.O.U. Città della Salute e della Scienza di Torino, University of Turin, Turin, Italy.

⁷ Psychosexuologist, Como, Italy.

⁸ Department of Urology, Hospital Universitario Puerta de Hierro-Majadahonda, Madrid, Spain.

⁹ Andrology Center, Villa Donatello Hospital, Florence, Italy.

Introduction and objectives Actually ESWL, phytochemicals and traction devices represent treatments without effective results for active phase of Peyronie's disease (PD); there is no specific therapy, except waiting for the worsening of the disease before treating it.

The purpose of this study is to evaluate the advantages of using a single intralesional injection of CCH in patients with active phase of Peyronie's disease (PD) and to assess whether this could limit the progression of the disorder by reducing penile curvature and ameliorate penile pain and sexual intercourse.

Materials and methods A total of 74 patients, sexually active men older than 18 years and presenting with acute phase of PD were considered eligible for the present study.

Main inclusion criteria at baseline were (a) presence of a palpable plaque at the level of tunica albuginea of the penis and (b) penile curvature >15° and/or penile pain either in flaccid state or during erection in the last 3 months. All patients enrolled received treatment with a single intralesional injection of CCH.

After the initial screening visit for eligibility, patients were requested to fill in self-administered questionnaires such as the International Index of Erectile Function (IIEF-5).

Penile curvature was calculated using a goniometer at maximum erection. Self-assessment of penile pain was evaluated by a visual analogue scale (VAS) ranging from 0 to 10.

Results: The mean difference (SD) of penile curvature between baseline and after single intralesional injection of CCH was 19.3 (8.4)°, $P < 0.0001$; the mean difference (SD) of VAS score at rest and of VAS score during intercourse between baseline and after single intralesional injection of CCH were 0.8 (1.1), $P < 0.0001$, and 3.8 (0.9), $P < 0.0001$, respectively. Furthermore there was an improvement of the IIEF-5 score after treatment (mean difference (SD) 1.1 (0.9), $P < 0.001$). At multivariable regression analysis the time since disease onset (modelled with non-linear terms) and baseline curvature were independently associated with degree of curvature improvement (coeff:0.30; 95% CI: 0.16-0.44) after single intralesional injection (all $P < 0.03$).

Conclusions Although acute phase of PD has not been clearly ascribed yet as an indication for intralesional therapy with CCH, preliminary results suggest that a single CCH injection during this phase might represent an effective, minimally invasive treatment option by ameliorating penile curvature and improving IIEF.

Lo studio ha avuto finanziamenti: No

Codice: **C17**

MIGHT ANTI-INFLAMMATORY PRIMING ENHANCE THE ANTI-ERECTILE DYSFUNCTION EFFICACY OF PDE5 INHIBITORS? AN EXPLORATORY COHORT STUDY

Ninfa Alessandra Giacalone¹, Francesco Curto¹, Mauro Raichiz², Giuseppe Severini³, Francesco Trama³.

¹ Urology Operative Unit, "Istituto G. Giglio" Foundation (Cefalù, Italy),

² Clinical Pharmacology, Bioinformatics and Statistics Consultant, Milan, Italy

³ AOU Policlinico Federico II di Napoli

Background Evidences have been accruing over several years of a contributory role of low-grade systemic inflammation as a co-determinant of erectile dysfunction. The inflammatory interference and disruption of local microcirculation could contribute a so-far overlooked stumbling block to the full efficacy of PDE5 inhibitors. The idea-generating pilot study herein illustrated explored if attenuating such pro-inflammatory contribution to

the erectile dysfunctional milieu with the help of a dietary supplement could be of benefit by enhancing the efficacy of PDE5 inhibitors.

Methods Study design: Prospective cohort pilot study (14 subjects with diagnosis of moderate erectile dysfunction) with end-of-study comparison of final treatment outcomes vs. a random sample of ED recent historic controls from the mail author's urology ward. Cohort treatment: 1- month background anti-inflammatory priming with a dietary supplement of acknowledged anti- inflammatory and capillary protective properties (one 1-g tablet once daily) followed by 3 months of alternating every-other-day treatment with 25-mg sublingual sildenafil or the dietary supplement. Assessments: comparison of the overall skewness of the cohort distribution of IIEF-5 scores before and after the end of the treatment period, and purely exploratory comparison of the end-of-study EEIF-5 mean scores of the prospective cohort and the sample of historic controls.

Results Very strong left skewness of the IIEF-5 frequency distribution at the end of the study compared to the basal distribution of scores as a marker of strong efficacy; EEIF-5 mean scores, prospective active cohort vs. ED historic controls: 20.4 vs. 14.0.

Conclusions There was a very strong shift of IIEF-5 scores towards an overall picture of markedly less severe or no ED in the active sample. The exploratory comparison of end-of- treatment mean IIEF-5 scores in the active cohort vs. historic controls gives some preliminary support to the idea that modifying the pro-inflammatory erectile dysfunctional milieu with the help of the anti-inflammatory dietary supplement might indeed have contributed to the overall efficacy of the anti-ED treatment and enhanced the 3-month efficacy of sublingual sildenafil. Due to the purely hypothesis-generating nature of the study, further rigorous investigations are warranted to confirm this preliminary suggestion.

Lo studio ha avuto finanziamenti: No

Codice: **C18**

USE OF DISPOSABLE CIRCUMCISION SUTURE DEVICE IN CLINICAL PRACTICE: THE RESULTS OF ONE YEAR OF EXPERIENCE.

Fasbender Jacobitti Marco, Carrino Maurizio, Chiancone Francesco, Pucci Luigi, Fedelini Paolo

Andrology Unit, A.O.R.N. "A. Cardarelli", Naples, Italy

Introduction Use of a patented circumcision suture device allows to get an excellent aesthetic result, a clean incision, a fast recovery with a significantly reduction of surgical time, compared to the classical surgical technique.

Materials and methods A total of 15 men aged 21 to 59 years, underwent circumcision using a CE certified disposable suture device. Men with bleeding disorders, genital abnormalities (e.g. hypospadias) or advanced form of foreskin's lichen sclerosis were excluded. After a nerve block and disinfection, the bell was placed over the glans, its column was locked with a strap over the prepuce and secured into the device by a wing nut. If preputial ring was stenotic, a dorsal slit was performed. Frenulectomy (if needed) was done before circumcision. Squeezing the trigger (with safety lock) for 20 seconds, foreskin was cut and anastomosis was done by application of steel staples. After, a direct compression is performed on the wound for 5 minutes and a compressive dressing was applied for 24 hours. If no signs of bleeding, patients went home after 2 hours. A therapy with topical emollients to help the fall of staples and oral antibiotic was prescribed. They could return to normal physical activity after 5 days.

Staples fell within 15-25 days. A removal was required if they stayed for longer. In our experience, staples fall first in young men, perhaps because the tissues are more elastic.

Results No major complications were observed. In 2 cases the staples had not hooked both layers, due to the thickness of skin, so we had to complete with simple interrupted sutures using polyglactin 4-0. At the follow-up visit (30 days after surgery), all patients showed satisfaction for the aesthetic results.

Conclusions In conclusion, the use of circumcision suture device has many advantages: a reduced use of the operating room, fewer surgical devices, fewer complications, less pain and an excellent aesthetic result with a rapid recovery.

Despite this, it has some limitations: if the foreskin is particularly thick, the anastomosis between cutaneous and mucosal layers may not happen correctly, because the depth of closed staples is only 1.3 mm. Furthermore, if patient would like a prepuce-sparing plasty, it will be necessary a classic surgical technique. So, it's necessary a good selection of candidate patients for this technique.

Lo studio ha avuto finanziamenti: No

Codice: **C19**

TOTAL GLANS RESURFACING FOR THE MANAGEMENT OF LOCALIZED PENILE CANCER: A RETROSPECTIVE COHORT ANALYSIS IN A TERTIARY REFERRAL NETWORK

Marco Falcone, Mirko Preto, Lorenzo Bertolino, Massimiliano Timpano, Ceruti Carlo, Omidreza Sedigh, Paolo Gontero

AOU Città della Salute e della Scienza - S.C. Urologia

Introduction and aim Penile cancer is a rare malignancy, representing 1% of male's cancers worldwide. Strong evidences on organ preserving surgery are still lacking. Particularly, little data outline the effectiveness and safety of total glans resurfacing (TGS) in the management of localized penile cancer. The aim of our study is to report both surgical and oncological outcomes of TGS in a consecutive series of localized penile cancers.

Materials and methods From 2004 to 2018 a consecutive series of 37 patients underwent a TGS in a tertiary referral network. Patients affected by lichen sclerosus were excluded from this study. Descriptive features and surgical outcomes were extrapolated from the clinical records. Medium-term oncological outcomes were assessed. Statistical analysis was conducted with Stata 12.

Results 26 consecutive patients underwent a TGS for a localized penile cancer. Preoperative patients' features are summarized in Table 1. No intraoperative complications were reported. Median hospital stay was 5 days. Postoperative complications were minimal (3.8%). Overall, 96% of the patients had a complete graft take. Only 3 cases (11.5%) experienced a local recurrence and they were managed by a salvage organ sparing surgery at a median follow-up of 11 months. No regional nodal recurrence was reported. Final histology confirmed CIS in 42.4% and T1 in 53.8% of cases. The single patient who had a T2 cancer at final histopathology was managed by a glansectomy and a staging bilateral inguinal lymphadenectomy. Overall survival rate was 100% and 1-year recurrence free survival was 92.3%.

Conclusions TGS represents an excellent option for organ preserving surgery in patients with a localized penile cancer. Surgical and oncological outcomes proved to be satisfactory. We should rely on TGS

to manage all cases of localized penile cancer.

Lo studio ha avuto finanziamenti: No

Codice: **C20**

COMPARISON OF INTRALESIONAL HYALURONIC ACID VS. VERAPAMIL FOR THE TREATMENT OF ACUTE PHASE PEYRONIE'S DISEASE: A PROSPECTIVE, OPEN-LABEL NON-RANDOMIZED CLINICAL STUDY

Andrea Cocci¹, Fabrizio Di Maida¹, Gianmartin Cito¹, Riccardo Campi¹, Riccardo Tellini¹, Andrea Mari¹, Marina Di Mauro¹, Marco Falcone², Marco Capece³, Giulio Garaffa⁴, **Nicola Mondaini**⁵, Andrea Minervini¹, Giorgio Ivan Russo⁶

1 Department of Urology, Careggi Hospital, University of Florence, Largo Brambilla 3, 50134, Florence, Italy

2 Department of Urology, University of Turin, Corso Bramante 88, 10126, Turin, Italy

3 Department of Urology, University of Naples, Via Sergio Pansini 5, 80131, Naples, Italy

4 The Institute of Urology, University College of London Hospital, London, UK

5 Urology Section, Villa Donatello Clinic, Via Attilio Ragionieri 101, 50019, Sesto Fiorentino, Italy

6 Department of Urology, Vittorio Emanuele II, University of Catania, Via Plebiscito 628, 95124, Catania, Italy

Introduction and objectives The aim of the present study was to compare the efficacy and safety of intralesional hyaluronic acid (HA) as compared with Verapamil injection in patients in the acute phase of Peyronie's Disease (PD).

Materials and methods Between January 2015 and December 2018, men in the acute phase of PD were prospectively recruited at our Institute. This open-label, prospective study included two different protocols (Group A and B). Group A: 8-week cycle of weekly intraplaque injections with HA; Group B: 8-week cycle of weekly intraplaque injections with Verapamil. Penile curvature, IIEF-5 score and Visual Analogue Score (VAS) were assessed at baseline and after 3 months.

Results Overall, 244 patients with acute phase of PD were enrolled. Of these, 125 received intralesional HA (Group A), while 119 received intralesional Verapamil (Group B). All patients completed the treatment cycle. At enrollment, the median age was 56.0 years (IQR: 47.0-63.0), the median curvature 35.0 degree (IQR 25.0-45.0), the median IIEF-5 score 11.0 (IQR 4.0-20.0) and the median VAS 4.0 (IQR 4.0-5.0). The median difference between post- and pre-treatment IIEF-5 was 1.0 (95% CI 1.12 to 1.94) in Group A and 0.0 (95% CI -0.0398 to 0.14) in Group B ($p < 0.05$) and the median difference for VAS score was -4.0 (95% CI -4.11 to -3.65) in Group A and -1.0 (95% CI -0.5 to 2.01) in Group B ($p < 0.05$). No injection-site ecchymosis or hematomas were observed.

No local or systemic drug adverse events were recorded.

Conclusions Intralesional HA injections could represent a reliable treatment option for the conservative management of patients with acute phase of PD.

Lo studio ha avuto finanziamenti: No

Codice: **C21**

THE DAILY THERAPY WITH L-ARGININE 2500 MG AND TADALAFIL 5 MG IN COMBINATION AND IN MONOTHERAPY FOR THE TREATMENT OF ERECTILE DYSFUNCTION: A PROSPECTIVE, RANDOMIZED MULTICENTRE STUDY

Luigi Gallo¹, Pasquale Sarnacchiaro¹, Stefano Pecoraro², **Mauro Silvani**³, Gabriele Antonini⁴

¹ Gallo Uro-Andrology Centre, Naples, Italy

² Division of Urology Malzoni Clinic, Avellino, Italy

³ Division of Urology Santa Rita Clinic, Vercelli, Italy

⁴ Division of Urology Sapienza University, Rome, Italy

Objective To evaluate the effectiveness and tolerability of tadalafil 5 mg and L-Arginine 2,5 grams in mono- and combination therapy in patients affected by erectile dysfunction (ED).

Methods Recruited patients completed at baseline and after treatment the International Index of Erectile Function erectile function domain (IIEF-EF) and Sexual Encounter Profile (SEP) diaries. The survey was randomized into three groups with an equal allocation ratio. Group A received daily L-Arginine 2500 mg; Group B received daily Tadalafil 5 mg and Group C received both daily L-Arginine 2500 mg plus daily Tadalafil 5 mg. The duration of therapy in all three groups was 12 weeks. The main outcome measures were the change from baseline to after treatment in IIEF-EF score and in per-patient percentage of "yes" responses to SEP Question 3. Safety was assessed by evaluating all reported treatment-emergent adverse events (AEs).

Results 300 eligible patients were enrolled and 100 subjects for each group were allocated. Basing on the IIEF-EF score men were divided into three categories: Severe, Moderate and Mild ED. Overall IIEF-EF score increased after therapy in all groups: in Group A from 15 ± 7 to $18,1 \pm 9,2$; in Group B from $14,8 \pm 6,9$ to $20,8 \pm 7,3$ and in Group C from $14,9 \pm 7,1$ to $22 \pm 7,5$. In mild ED mean IIEF-EF score increased from $22,1 \pm 2,2$ to $27,5 \pm 2,3$ in group A; from $22,1 \pm 2,2$ to $27,8 \pm 2$ in group B and from $22,2 \pm 2,2$ to $29,3 \pm 0,9$ in group C. We report a total of 11, 53 and 67 cases of AEs in group A, B and C respectively.

Conclusions In the mild ED population Arginine had comparable effects to tadalafil 5mg with a lower incidence of AEs. Combination therapy was superior to monotherapies.

Lo studio ha avuto finanziamenti: No

Codice: **C22**

PEYRONIE'S DISEASE IS "LETHAL" FOR THE SEXUAL LIFE OF A COUPLE.

Francesco Trama¹, Ester Illiano², Alessandro Zucchi², Elisabetta Costantini²

¹ Università degli studi di Napoli, Policlinico Federico II

² Università di Perugia, clinica Urologica AUG, AOSP Santa Maria Terni

Introduction & objectives Peyronie's disease (PD) causes penile deformity and can result in sexual dysfunction and psychological distress. Currently, nothing is known about the psychosexual impact on the partners of men with PD. The aim of this study was to evaluate the sexual functioning, sexual satisfaction, negative affect, of female partners.

Materials & methods This was a prospective study. We included all sexually active couples whose male partner performed the treatments for PD,

Pre - treatment the average curvature of the patients' penis, it was noted that the average curvature corresponded to $56^\circ \pm 6.4$ SD.

Our protocol provided: Low Intensity Shock-wave Therapy (Storz® , a total of 3000 shockwaves, 1000 energy flux density = 0.20 mJ/mm², frequency = 3 Hz) 1 time weekly for 6 weeks associated with treatment by Vacuum Constriction Device 2 times daily for 6 weeks. Before of treatment and after 6 weeks each male partner completed the International Index of Erectile Function short form (IIEF-5) Questionnaire, while their female partners completed the Female Sexual Functioning Index (FSFI). Statistical analysis: the Mann-Whitney and Wilcoxon test, $p < 0.05$

Results Seventy men were evaluated, of whom 50 (71%) were accompanied by their female partners to our Clinic. Among the 50 couples 40 sexually active couples were eligible for the analysis. The table 1 included demographic data of sample. Overall, partners of men with PD were found to have decreased sexual function and sexual satisfaction pre treatment. After treatment there were significant improvements in male sexual function reflected in total IIEF scores (median score pre treatment 17.5 (11-23) vs 21 (13-25) post treatment, $p = 0.0001$). Their partners had statistically significant improvements in all FSFI domains (Table 2), in particular regarding the orgasm, the pain during sexual intercourse and the global satisfaction. we measured the curvature of the penis following treatment in all patients and found an average of $44^\circ \pm 3.6$ SD ($p < 0.04$). In addition, we measured the score of the VAS Questionnaire on pain during penetration about male partner. Pre treatment the average was 7/10 while post-treatment we found an average of 4/10 ($p < 0.001$)

Conclusion PD is associated with negative psychosexual effects on those with the disease and their partners. As a result, assessment and management should include the two members of the couple.

Lo studio ha avuto finanziamenti: No

Codice: **C23**

TREATMENT OF 1258 BULBAR URETHRAL STRICTURES USING GRAFT URETHROPLASTY: A RETROSPECTIVE SINGLE CENTER OUTCOME ANALYSIS

Mirko Preto¹, Enzo Palminteri², Giovanni Ferrari³, Lorenzo Gatti³, Pierluigi Bove⁴, Valerio Iacovelli⁴, Marco Falcone¹, Omidreza Sedigh¹, Lorenzo Bertolino¹, Ceruti Carlo¹, Paolo Gontero¹

1 AOU Città della Salute e della Scienza - S. C. Urologia

2 Humanitas Torino, Urethral and Genital Reconstructive Surgical Center

3 Hesperia Hospital, Centro C.U.R.E., Modena, Italy

4 San Carlo di Nancy Hospital, Rome, Italy

Introduction and aim To investigate surgical outcomes of different surgical grafting techniques for bulbar stricture. A single high volume tertiary referral center analysis was conducted.

Materials and methods A consecutive series of patients from 1997 to 2018, were screened. Inclusion criteria were: a bulbar stricture and its treatment with a graft urethroplasty technique (Dorsal, Ventral grafting, Dorsal+Ventral grafting or Dorsal termino-terminal (TT) mucosa preserving spongiosum+Ventral grafting). Patients with Lichen Sclerosus, hypospadias, penile or posterior urethral stricture were excluded. Patients underwent clinical evaluation, uroflowmetry and residual urine measurement every 6 months for 2 years after surgery and later once on year. When patient showed obstructive symptoms or Qmax <12 ml/s, the urethrography was repeated. A descriptive analysis was carried out setting the procedure' success rate as primary outcome. The treatment failure was defined as the need of any additional surgical revision.

Results 1258 patients were enrolled. 33.8% underwent more than one previous treatment. 18.4% did not undergo any treatment before. Median follow-up was 78 months. No significant differences in operative time and hospital stay were highlighted between the techniques. Buccal mucosa (MB) was used as graft in 94.3%, preputial skin and suine small intestinal submucosa (SIS) were used in 0.6% and 2% of cases. A mixed grafts (MB+preputial skin) was applied in 3.1%. Success rate was 88.1%. Average time for failure was 19 months.

Success rate were 95.3% in patients who have not undergone any procedure before, 88.9% after single treatment and 83.1% after two/more treatments. Multivariate analysis showed that absence of previous procedure represents a success predictor factor ($p=0.006$); previous multiple treatments is an independent predictive factor for failure ($p=0.017$). A significant difference was only recorded in-between TT-preserving+Ventral graft technique compared to others. MB was compared with the mixed tissue graft and a statistically significant deterioration for the mixed graft was recorded ($p=0.001$) at 60 months ($p=0.0055$). Age >47 and post-operative flow $<13\text{ml/sec}$ were identified as failure predictors.

Conclusions Grafting techniques have shown a high success rate. Predictive factors for failure of urethroplasty are age, stricture length and previous treatments. BM graft showed best results. A long term follow-up is mandatory.

Lo studio ha avuto finanziamenti: No

Codice: **C24**

CAN CYTOMEGALOVIRUS (CMV) INFECTION AFFECT MALE REPRODUCTIVE FUNCTION? RESULTS OF A RETROSPECTIVE SINGLE-CENTER STUDY

Gianmartin Cito¹, Maria Elisabetta Coccia², Rita Picone², Rossella Fucci², Elisabetta Micelli³, Andrea Cocci¹, Marina di Mauro⁴, Luca Gemma¹, Francesca Rizzello², Claudia Giachini², Andrea Minervini¹, Marco Carini¹, Ph.D., Alessandro Natali¹

¹Department of Urology, Careggi Hospital, University of Florence, Florence, Italy

²Assisted Reproductive Technology Centre, Careggi Hospital, University of Florence, Florence, Italy

³Department of Gynecology and Obstetrics, St. Claire Hospital, University of Pisa, Pisa, Italy

⁴Department of Urology, Vittorio Emanuele Hospital, University of Catania, Catania, Italy

Introduction and objectives Cytomegalovirus (CMV) is mainly investigated for the consequences of prenatally transmission from mother to fetus, that can lead to severe disturbances of development. However, the impact of infection on the male reproductive health has been received little consideration, despite a potential negative effect of the virus on the spermatogenesis. Our aim is to investigate whether the chronic CMV infection can affect semen parameters in men with couple infertility. Secondary objective is to assess the impact of male CMV infection on the reproductive and pregnancy outcomes of CMV-seronegative women suffering from tubal factor.

Material and methods All the men were divided into two groups: Group 1 included CMV IgG-seropositive men, Group 2 comprised CMV IgG-seronegative patients. Seminal parameters were assessed. Two-pronuclear (2PN) fertilization rate (FR), 1-2-3PN FR, cleavage rate (CR), miscarriage rate (MR), pregnancy rate (PR) and live birth rate (LBR) were collected.

Results 222 men were included: 115 (51.8%) in Group 1, 107 (48.2%) in Group 2. There was reported a low trend towards higher sperm concentration/ml, total sperm count and viability in CMV IgG-seronegative males, compared to CMV IgG-seropositive ($p>0.05$). Semen volume, pH, motility and normal sperm morphology were similar among groups. Considering the subgroup of men, partners of CMV IgG-seronegative females, 65 couples (29.2%) were selected. Median 2PN FR was 67.0%, total FR 83.0%, CR 100%, PR/cycle 26.2%, MR 10.8%, LBR/cycle 15.4%. No significant differences were found regarding the reproductive outcomes between CMV IgG-seropositive men and those seronegative.

Conclusions CMV did not seem to play a key role in male reproductive function, as well as in influencing sperm fertility potential in the assisted reproductive outcomes.

However, serology screening could be crucial to identify primary acute infection, in order to prevent virus transmission by sperm sample.

Lo studio ha avuto finanziamenti: No

Codice: **C25**

INCISIONE DELLA PLACCA DI PD E GRAFTING CON PATCH IN COLLAGENE EQUINO (Tachosil)

Enrico Caraceni¹, Daniele Mazzaferro¹, Luigi Quaresima¹, Andrea Cicconofri²

¹ U.O. Urologia di Civitanova Marche, AV 3 ASUR Marche

² Scuola Specializzazione Urologia, Università Politecnica delle Marche di Ancona

Introduzione Presentiamo la nostra esperienza nel trattamento chirurgico della malattia di Peyronie (PD) mediante incisione a tutto spessore della placca e grafting con patch in collagene equino (Tachosil®)

Materiali e metodi un totale di 8 pz che presentavano curvature comprese tra i 60 e gli 80 gradi.

Tutti i pazienti sono stati valutati nel preoperatorio con somministrazione del International Index of Erectile Function 15 items (IIEF-15), foto del pene in erezione e doppler penieno dinamico.

Tecnica chirurgica: posizionato catetere vescicale e punto di trazione sul glande, si esegue degloving completo del pene. Posizionato di un tourniquet alla radice del pene si induce erezione idraulica per evidenziare la curvatura dello stesso. Si incide la fascia di Buck a lato del corpo spongioso dell'uretra e la si scolla dall'albuginea quanto più possibile per via smussa in direzione ventro-dorsale sino al fascio vascolo-nervoso. Si ripete la prova idraulica e si identifica la porzione di albuginea interessata da malattia; dopo averla delimitata con un pennarello nel punto di maggior curvatura, la si asporta con forbici, previa incisione. Si scolla il margine libero dell'albuginea dal tessuto cavernoso sottostante per favorire una maggiore distensione del difetto. Si posiziona un punto in ciascuno dei 4 angoli della tunica albuginea e si mette in trazione il pene a simulare la distensione dell'albuginea durante l'erezione. Misurato il difetto si confeziona un patch con lunghezza e larghezza maggiore di almeno 1 cm rispetto a quelle del tessuto mancante, in modo da favorirne una migliore adesione. Si posiziona il patch apponendo lieve pressione con una garza calda senza suturarlo. Si può utilizzare un secondo Tachosil qualora l'adesione periferica del primo patch non sia soddisfacente. La chiusura della fascia di Buck e degli strati superficiali completa l'intervento. Si lascia per circa una settimana una medicazione blandamente compressiva. Dopo l'intervento, l'utilizzo del Vacuum device per almeno 3 mesi è stato consigliato a tutti i pazienti.

Risultati la percezione alla palpazione del graft è risultata negativa già dopo 30 giorni in tutti i pazienti. A 3 mesi dall'intervento tutti i pazienti hanno mostrato un miglioramento dell'IIEF-15. La correzione del recurvatum è stata valutata mediante foto in erezione: nel 100% dei pz si è ottenuto un miglioramento, nel 76% si è conseguito un raddrizzamento completo ed in nessun caso si è avuta una sovracorrezione. In nessun caso si è osservata la comparsa

di ematoma, la contrazione del graft con accorciamento penieno, né recidive di curvatura o difficoltà alla penetrazione. L'ipoestesia del glande, comune nel post operatorio, è sempre regredita dopo alcuni mesi.

Conclusioni il questionario di soddisfazione è risultato elevato in tutti i pazienti, confermando quindi l'efficacia e la fattibilità di tale metodica.

Lo studio ha avuto finanziamenti: No

Codice: **C26**

EJACULATION SPARING TREATMENT FOR BENIGN PROSTATIC HYPERPLASIA: TRANSPERINEAL LASER ABLATION.

Antonio Ruffo¹, Filomena Zanfardino¹, Francesco Trama⁴, Nikola Stanojevic², Giuseppe Romeo³, Filippo Riccardo⁴, Fabrizio Iacono⁴, Renato Regine¹

1 Andrea Grimaldi Medical Care, Naples, Italy,

2 Sava Perovic Foundation, Belgrade, Serbia,

3 A.O.R.N Antonio Cardarelli, Urology, Naples, Italy,

4 University of Naples Federico II, Urology, Naples, Italy

Objective To evaluate the feasibility and safety of an alternative procedure for the treatment of benign prostatic hyperplasia (BPH) : Transperineal laser ablation (TPLA) of the prostate.

Materials and methods 68 patients (pts) (age 72.4 ± 6.7 years) with LUTS and BPH were enrolled. Mean prostate volume was 70.2 ± 23.5 m (from 30 to 100 grams). Inclusions criteria was : Peak urinary flow: ≤ 15 mL/sec, International Prostatic Symptoms Score (IPSS) > 19 , Postvoid residual: > 100 mL.

Exclusion criteria were : catheterized pts, history of neurodegenerative disease, positive urinary culture, prostate volume > 100 grams, Clinical suspicion of prostate cancer (Abnormal digital rectal examination, PSA levels). The procedure was performed under local anaesthesia (Periprostatic nerve block) plus sedation in 48 pts and under subarachnoid block in 20 pts.

Under US guidance, up to four 21G applicators with a length of 15 cm were inserted into the prostate tissue. Each treatment was performed with diode lasers (Eufoton Trieste / Medicalasers Napoli) operating at 980 nm with 1800 joules per lobe at a power of 5 watts. The primary endpoint was the reduction of prostate volume (misured at 6 months follow-up) and maintained ejaculation in the treated pts. Secondary endpoints included operating time, ablation time, energy used, hospitalization time, catheterization time and International Prostate Symptom Score (IPSS) variation, quality of life (QoL), peak urinary flow rate (Q max), post-void residual (PVR).

Results All procedures have been successful from a technical point of view. The average operating time was 38 ± 6.5 min, the average ablation time 12.4 ± 2.8 min, the average energy used 11.622 ± 4350.5 J, the average hospital stay 1.7 ± 0.2 days and the average catheterisation time 6.1 ± 4.0 days. At 6 months, IPSS improved from 22.5 ± 2.1 to 12.3 ± 1.8 ($P < 0.001$), QoL from 4.8 ± 0.2 to 1.8 ± 0.3 ($P < 0.05$), Q max from 4.6 ± 3.1 mL/s to 12.8 ± 2.6 mL/s ($P < 0.001$), PVR from 120 ± 59.3 to 46.7 ± 27.9 ($P < 0.001$) and average prostate volume 70.2 ± 23.5 ml to 48.8 ± 21.8 mL ($P < 0.05$). 53 out of 61 sexually active patients (86.8%) maintained ejaculation following treatment. 18 pts (26,5%) needed recatheterization for

acute urinary retention. Perineal pain was reported in 3 pts, urethrorrhagia in 7 pts.
8 pts reported urinary symptoms due urinary infections, treated successfully with antibiotic therapy.

Conclusions TPLA is a safe, feasible and promising procedure for the treatment of BPH

Lo studio ha avuto finanziamenti: No

Codice: **C27**

EFFICACY AND SAFETY OF LIDOCAINE-PRILOCAINE SPRAY VS. DAPOXETINE FOR THE TREATMENT OF PREMATURE EJACULATION: AN OBSERVATIONAL MONOCENTRIC STUDY

Gianmartin Cito, Elena Di Virgilio, Andrea Cocci, Luca Gemma, Nicola Laruccia, Pierangelo Verrienti, Roberto Di Costanzo, Alice Livoti, Andrea Minervini, Lorenzo Masieri, Marco Carini, Alessandro Natali

Department of Urology, University of Florence, Florence, Italy

Introduction and Objectives When premature ejaculation (PE) occurs from first sexual experience is defined as life-long. First-line treatment is pharmacotherapy. Topical anaesthetic agents are a viable alternative to oral therapy. Purpose is to assess the efficacy and safety of lidocaine-prilocaine spray compared to dapoxetine oral tablets, in patients 'non-responders' to lidocaine-prilocaine cream.

Materials and Methods Patients with lifelong PE were included in this observational retrospective monocentric study and divided into 2 groups. Group 1 was administered lidocaine-prilocaine 150mg/ml+50mg/ml cutaneous spray about 5 min before each sexual intercourse (SI), Group 2 was prescribed dapoxetine 30mg film-coated tablets on-demand about 1 hour before SI. Intravaginal ejaculation latency time (IELT), International Index of Erectile Function (IIEF-5), Index of Premature Ejaculation (IPE), Premature Ejaculation Diagnostic Tool (PEDT), Premature Ejaculation Profile (PEP) were evaluated. Patients were assessed at baseline and at one-month follow-up visit.

Results 28 patients were enrolled. 17 men in Group 1 and 11 in Group 2. Mean age was 32.2 ± 3.5 years. Baseline IELT was ≤ 1 min in both groups. Mean change in IELT from baseline to the end of therapy was similar in Group 1 and Group 2 (3.2 minutes and 3.0 minutes, respectively, $p < 0.05$). In Group 1, baseline and one-month follow-up IIEF-5 was 20 ± 3 and 22 ± 4 , while in Group 2 19 ± 3 and 21 ± 4 ($p > 0.05$). At the end of treatment, scores for the IPE significantly decreased (7.0 vs 15 and 6.9 vs 14 , respectively, $p < 0.05$). Mean PEDT decreased in the Group 1 and Group 2 (14 ± 3 vs 10 ± 2 and 13 ± 2 vs 10 ± 3 , respectively, $p < 0.05$). Mean PEP was significantly higher at the end of therapy in both groups (10 ± 3 vs 16 ± 2 and 9 ± 2 vs 16 ± 3 , respectively). No significant differences were found among groups in terms of IIELT, IIEF-5, IPE, PEDT, PEP at the follow-up visit. 15 patients (88.2%) of Group 1 preferred lidocaine-prilocaine, while 6 patients (54.5%) of Group 2 favored dapoxetine rather than lidocaine-prilocaine cream ($p < 0.05$). 6 patients (54.4%) under dapoxetine reported nausea, hypotension and gastralgia. No side effects were recorded in patients under lidocaine-prilocaine spray.

Conclusions Lidocaine-prilocaine spray proved to be efficient and safe in improving the bothersome related to

PE, similarly to dapoxetine. The absence of side effects, easy handling to use and rapid time of action make lidocaine-prilocaine spray preferable to other viable treatments.

Lo studio ha avuto finanziamenti: No

Codice: **C28**

EXTERNAL VALIDATION OF THE JARGIELLO'S CLASSIFICATION OF ANATOMIC VARIATIONS OF THE LEFT GONADAL VEIN DURING VARICOCELE EMBOLIZATION: A SINGLE CENTER-EXPERIENCE

Luca Boeri¹, Franco Palmisano¹, Irene Fulgheri², Matteo Turetti¹, Francesco Botticelli¹, Carlo Silvani¹, Giampaolo Lucignani¹, Vito Lorusso¹, Elena Lievore¹, Carolina Bebi¹, Mariapia Serrago¹, Mario D'Amico³, Franco Gadda¹, Andrea Salonia⁴, Gianpaolo Carrafiello³, Emanuele Montanari¹

¹ Department of Urology, Foundation IRCCS Ca' Granda – Ospedale Maggiore Policlinico, University of Milan, Milan, Italy

² Department of Pharmacy, Foundation IRCCS Ca' Granda – Ospedale Maggiore Policlinico, Milan, Italy

³ Department of Radiology, Foundation IRCCS Ca' Granda – Ospedale Maggiore Policlinico, University of Milan, Milan, Italy

⁴ Division of Experimental Oncology/Unit of Urology; URI; IRCCS Ospedale San Raffaele, Milan, Italy

Introduction & objectives Percutaneous embolization (PE) of the left internal spermatic vein (SV) is a minimally invasive option for the treatment of varicocele. Several anatomic variability and venography-based classification of varicoceles have been described, with limited application in clinical practice. We aimed to present anatomical variations of left internal SV based on the new Jargiello classification in a cohort of men submitted to PE and test its applicability in clinical practice.

Methods Demographic and clinical data of 70 consecutive patients with left sided varicocele who underwent PE were analysed.

Intraoperative phlebography images were reviewed by two expert urologists in a blinded fashion and anatomic variants of gonadal veins were categorized into five subtypes based on the Jargiello's classification. Descriptive statistics and Cohen's Kappa analysis were used to describe the whole cohort.

Results Of 70 procedures, in 5 patients embolization was not performed due to the lack of venous reflux in the SV. Among the final cohort of 65 patients, median (IQR) age was 27 (23,32) years. Median sperm concentration, progressive motility and normal morphology were 20 (5.3, 37) mil/mL, 35% (22,53) and 3% (1,5), respectively. Of 65, 8 patients had postsurgical recurrent varicoceles. Preoperative grades of varicocele were II, III, IV and V in 6, 36, 17 and 6 patients, respectively. Embolization was performed at the pelvic, lumbar and pelvic+lumbar level of SV in 46, 5 and 6 patients and the median number of coiled used for embolization was 6 (5,8). SV anatomy was classified as type I (26.2%), type II (7.7%), type III (60.0%), (23.1% IIIa, 16.9% IIIb/c, 3.1% IIIc), type IV (4.6%) and type V (1.5%) by the Reader 1. Likewise the Reader 2 found a score of type I to V in 33.8%, 6.2%, 46.2%, (10.8% IIIa, 16.9% IIIb, 18.5% IIIc), 12.3% and 1.5% men, respectively. Cohen's Kappa analysis showed a substantial inter-reader agreement using the Jargiello's classification ($K=0.61$, $p<0.001$).

No differences in classification score were seen between primary or recurrent varicocele in both readers (all $p>0.05$).

Conclusions There is a wide variability among SV anatomies of patients undergoing varicocele embolization with type III being the most frequent. No SV anatomical differences were noted between primary or recurrent varicoceles. The Jargiello's classification of SV anatomy can be easily used in clinical practice with a good inter reader agreement.

Lo studio ha avuto finanziamenti: No

Codice: **C29**

PRELIMINARY DATA OF A NEW SURVEY TO ASSESS THE KNOWLEDGE ABOUT SEXUALITY OF ADOLESCENTS. "WHAT DO OUR BOYS KNOW ABOUT SEX?"

Francesco Persico¹, Paolo Fedelini¹, Luigi Pucci¹, Riccardo Giannella¹, Marco Fasbender Jacobitti², Marco Fabiano¹, Maurizio Carrino², **Francesco Chiancone**¹

¹ Urology Department, AORN "A. Cardarelli", Naples, Italy

² Andrology Department, AORN "A. Cardarelli", Naples, Italy

Introduction Adolescents under age 18 are often underrepresented in sexual health research. The aim of this study was to assess the knowledge about sexuality of adolescents under the age of 18.

Materials and methods The participants were enrolled during a cultural exchange project in September 2019. The survey consisted of three parts. The first part concerned generic anthropometric data and a subjective evaluation of the personal knowledge of sexuality and sexual health. The second part contained questions concerning knowledge of the male and female genitourinary system, physiology of reproduction, meaning of terms concerning the sexual sphere, contraceptive methods and sexually transmitted infections. The third part questioned the participants about personal sexual habits.

Results The sample was comprised of 80 participants (M age = 16.33 years, SD =0.97), 55% of whom identified as female, 45% male. 12.5 % of the participants believed they had insufficient knowledge of sexuality, 38.75 % scarce, 35 % sufficient; only 13.75 % believed they had a large knowledge of the subject. The main form of information was represented by internet (51.2%), followed by friends (28.75%). Only the 5% of the adolescents who completed the study stated that they had obtained information from doctors or scientific books. Analysing the data of part 3, we noticed that only the 10% had a stable partner. The 27.5 % of the participants has had a complete sexual intercourse. The 41.3 % had a regular masturbatory activity. 95.5 % of sexually active subjects used contraceptive methods; of these, the most common was the condom (85.7%), followed by the pill (14.3%). 55 % of the participants had never talked to somebody about sexuality.

Conclusions The importance of sexual education is often underlyed in schools. Data from the first part indicated that young people did not believe they had sufficient knowledge of sexuality. Moreover most errors about the world of sexuality were concentrated in the questions concerning the physiology of reproduction and in those concerning specific terminology. About 55% of participants declared that they never discussed this topic with someone. Often confidants were represented by friends. This could increase confusion and misinformation, leading to incorrect behaviours and

lifestyles. Our study represents a preliminary experience which, if implemented on a larger scale, could be useful to assess the knowledge of sexual health among European adolescents.

Lo studio ha avuto finanziamenti: No

Codice: **C30**

MEDICAZIONI IN ANDROLOGIA: USO DEL DuoDERM Extra Thin (Convatec)

E. Baldassarre¹, F. Persico², C. Ducret¹, A. Gillo¹, M. Jr Nardi², S. Mochet², S. Benvenuti¹

¹ SC Urologia, ASL Valle d'Aosta

² SC Chirurgia Generale e d'Urgenza, ASL Valle d'Aosta

Introduction La medicazione negli interventi di chirurgia peniena è ancora un challenge nella pratica quotidiana e varia molto in base all'esperienza del singolo Centro.

Dal 2017 nel nostro Ospedale usiamo sistematicamente il DuoDERM Extra Thin (Convatec), come medicazione di routine nei casi di chirurgia peniena pediatrica: circoncisione, ipospadia, buried poenis.

Gli eccellenti risultati in questa chirurgia ci hanno invogliato a usare la stessa medicazione anche nei casi di correzione del recurvatum penieno e nella chirurgia di placca nell'induratio poenis plastica (IPP).

Materials and methods Il DuoDERM Extra Thin è una medicazione idrocolloidale primaria per lesioni da asciutte a leggermente essudanti.

Per una corretta applicazione, bisogna alzare il pene, avvolgendolo con la medicazione, avendo l'accortezza di non stringere troppo l'asta ed in caso di usare due medicazioni messe una anteriore e una posteriore.

Prima dell'applicazione, è necessario rimuovere la carta protettiva bianca superiore cercando di ridurre al minimo il contatto delle dita con la superficie adesiva e tenendo il lato adesivo della medicazione sulla lesione. Una volta posizionata, va adattata delicatamente all'anatomia della zona per 30-60 secondi. Tre pazienti sono stati sottoposti a chirurgia peniena da ottobre a dicembre 2019: due casi di recurvatum congenito, trattati con correzione sec. Yachia della curvatura e un caso di IPP trattato con incisione della placca, apposizione di patch in TachoSil (Ethicon) e plicature dell'albuginea. In tutti e tre i casi, al termine dell'intervento veniva apposto DuoDERM Extra Thin sulla cute dell'asta e quindi eseguita medicazione compressiva che veniva rimossa in I giornata postoperatoria.

Results I pazienti venivano controllati a 7 gg, ad un mese e a tre mesi. Il risultato estetico era ottimale in tutti i casi, con buona soddisfazione soggettiva.

Il paziente operato per IPP presentava una curvatura residua dorsale 10°circa e all'ECO Doppler Penieno Dinamico presentava VPS sinistra 40.5 cm/sec, destra 106 cm/sec e un normale Indice Resistivo (sinistra: 0.979 destra: 0.928)

Conclusions Il DuoDERMTM Extra Thin semplifica in modo considerevole la medicazione in pazienti sottoposti a chirurgia peniena. I vantaggi sono molteplici: costo esiguo (circa 3 Euro al pezzo), facilità di gestione domiciliare, buona adesività, resistenza, facilità nella rimozione. In prospettiva futura crediamo possa essere applicabile anche ai pazienti

sottoposti a posizionamento di protesi peniena.

Lo studio ha avuto finanziamenti: No

Codice: **C31**

TIME-TO-RECOVERY OF BASELINE ERECTILE FUNCTION AFTER HOLEP – RESULTS FROM A PROSPECTIVE TRIAL (ExpHo)

Paolo Capogrosso^{1,2}, Nicolò Schifano^{1,2}, Francesco Pellegrino^{1,2}, Luigi Candela^{1,2}, Giuseppe Fallara^{1,2}, Gabriele Sorce^{1,2}, Andrea Baudo^{1,2}, Walter Cazzaniga^{1,2}, Luca Boeri^{2,3}, Costantino Abate², Andrea Salonia^{1,2}, Francesco Montorsi^{1,2}

¹ Università Vita-Salute San Raffaele, Milan, Italy

² Division of Experimental Oncology/Unit of Urology; URI; IRCCS San Raffaele Scientific Institute, Milan, Italy

³ Department of Urology, Foundation IRCCS Ca' Granda – Ospedale Maggiore Policlinico, University of Milan, Milan, Italy

Objective Erectile dysfunction (ED) outcomes after surgery for LUTS/BPE have been variably reported. Likewise, changes in postoperative erectile function (EF) have been scantily analyzed over time. We sought to investigate EF outcomes after Holmium Laser Enucleation of the Prostate (HoLEP) in a cohort of patients consecutively treated at a single center.

Materials and Methods The ExpHo trial (NCT03583034) is a prospective observational study collecting data of patients submitted to HoLEP by a single highly experienced surgeon, with more than 1000 procedures completed, at a single academic center. All patients completed the International Index of Erectile Function (IIEF) and the International Prostatic Symptoms Score (IPSS) at baseline, before surgery. Pre-HoLEP non-sexually active patients were excluded. Throughout the follow-up (FU), patients have been re-assessed at 1 week, and at 1, 3, 6 and 12 months. Postoperative EF recovery was defined as an IIEF-EF score equal or higher to baseline values. Kaplan-Meier (KM) analyses estimated the probability of EF recovery over time. Cox-regression analysis tested predictors of EF recovery.

Results Data were available for 72 sexually active patients. At baseline, median (IQR) age was 66 (62,73) years; IPSS: 20 (14, 23.5) and prostate volume (PV): 90cc (65, 115). Overall, 46 (64%) patients did complain of ED even before surgery, with 25 (54%) reporting severe ED (IIEF-EF<11). We observed a significant decrease of mean IIEF-EF score at 1-mo FU compared to baseline (18.8 vs. 13.5; p=0.0008) with a subsequent improvement at 3-mo (IIEF-EF: 17.1) and 6-mo (IIEF-EF: 21.4) assessments. Of all, 34 (47.2%) patients reported EF improvement at last FU compared to baseline. The estimated probability of EF recovery after surgery was 42% (95%CI: 30,55) 60% (95%CI: 48,73) and 80% (95%CI: 65,92) at 1-mo, 3-mo and 6-mo after surgery, respectively. At cox regression analysis, preoperative (i.e., age, BMI, CCI, PV, IIEF, IPSS) and intraoperative variables (i.e., duration of surgery, total energy delivered, intraoperative complications) were not associated with the probability of EF recovery.

Conclusions Post-HoLEP EF significantly decreases at short-time FU after surgery. However, we observed a

high probability of EF recovery over the first 6-months post-HoLEP, with almost half of patients reporting an EF improvement over time after surgery.

Lo studio ha avuto finanziamenti: No

Codice: **C32**

RISULTATI DELLA TESE NEL RECUPERO DEGLI SPERMATOZOI IN SOGGETTI AFFETTI DA SINDROME DI KLINEFELTER

Massimo Iafrate¹, **Nicolò Leone**¹, Alberto Aceti¹, Mariangela Mancini¹, Massimo Menegazzo², Andrea Garolla², Nicola Passerin³, Sara Corrà³, Ilaria Cosci², Carlo Foresta², Filiberto Zattoni¹

¹ Clinica Urologica, DISCOG

² UOC Andrologia e Medicina della Riproduzione Umana

³ Università di Padova

Introduzione e obiettivo La Sindrome di Klinefelter è conseguente ad una aneuploidia cromosomica caratterizzata da cariotipo 47,XXY. Clinicamente l'individuo affetto si presenta con testicoli di ridotte dimensioni e di aumentata consistenza. Le tecniche di fecondazione assistita consentono oggi la paternità anche qualora sia possibile reperire un numero limitato di spermatozoi pertanto nei soggetti affetti da Sindrome di Klinefelter frequentemente si eseguono tentativi per il recupero chirurgico di spermatozoi testicolari. L'obiettivo del nostro studio è stato quello di valutare l'efficacia della TESE nei pazienti affetti da sindrome di Klinefelter.

Materiali e Metodi Si tratta di uno studio retrospettivo osservazionale. Nel periodo Gennaio 2002 – Dicembre 2019, 122 pazienti di età media 29 ± 7 anni, affetti da sindrome di Klinefelter, sono stati sottoposti a intervento di TESE con crioconservazione degli spermatozoi recuperati. Tutti i pazienti erano azoospermici e sono stati ricoverati in regime di Day-Hospital. Dopo l'infiltrazione di anestetico locale (lidocaina) della cute scrotale, associata a sedazione, è stata eseguita una TESE bilateralmente. Il recupero degli spermatozoi e la loro eventuale crioconservazione è stata eseguita mediante analisi particolareggiata del frammento biotico e recupero dei singoli spermatozoi mediante micromanipolatore. La crioconservazione veniva effettuata anche quando gli spermatozoi erano molto pochi, compreso il singolo spermatozoo. Tutti i pazienti avevano eseguito preoperatoriamente una ecografia scrotale e un dosaggio del FSH.

Risultati Nel 31,9% dei casi (39 dei 122 pazienti) è stato possibile recuperare uno o più spermatozoi; In particolare su 18 pazienti il recupero è stato possibile bilateralmente, mentre, in 21 pazienti solo unilateralmente.

TESE CON RECUPERO spermatozoi:

- età media 28.53 ± 6.91 anni,
- valore medio di FSH è risultato pari a 30.74 ± 14.34 IU/L
- volume medio testicolo destro pari $2.24 \pm 1,1$ cc
- volume medio testicolo sinistro pari $2.08 \pm 0,84$ cc

TESE SENZA RECUPERO di spermatozoi:

- l'età media 30.8 ± 7.22
- valore medio di FSH è risultato pari a 28.91 ± 19.09
- volume medio testicolo destro pari $2.10 \pm 0,75$ cc
- volume medio testicolo sinistro pari $2.31 \pm 0,89$ cc

Conclusioni I nostri dati dimostrano che nei pazienti affetti da Sindrome di Klinefelter nonostante la grave ipotrofia testicolare e i livelli di FSH elevati è frequente il recupero di spermatozoi mediante TESE (31.9%). In accordo con la letteratura, la presenza di focolai di spermatogenesi non sembra essere prevedibile dai dati clinici (età, volume), e dai dati

laboratoristici (FSH, LH, Testosterone). I pazienti devono essere accuratamente informati prima di essere sottoposti a TESE riguardo i risultati attesi.

Lo studio ha avuto finanziamenti: No

Codice: **C33**

NESBIT'S CORPOROPLASTY: IS IT SATISFACTORY IN THE LONG TERM?

Guzzardo Calogero, Pavone Carlo, Bishqemi Arjan, Agiato Sonia Maria, Segreto Ermanno, Simonato Alchiede

AOU Policlinico Paolo Giaccone di Palermo

Objectives Provide a qualitative assessment on the long-term maintenance of the surgical outcome of Nesbit's corporoplasty in patients affected by Peyronie's disease; Estimate the role of pre- and post-operative photographic documentation in managing patient expectations.

Materials and Methods We evaluated 61 patients aged between 47-74 years (average age 60 years), who underwent Nesbit's corporoplasty in the period 2009-2018, of which 9 were deceased at the time of the study, and 12 were untraceable. Mean follow up time: 5 years (range 1-10 years). 28 of the 39 remaining patients underwent a clinical-anamnestic examination, as well as photographic documentation of the erect penis on three projections, as the other 11 refused the clinical examination, but contributed to the study through a telephone interview. Considered parameters: type and degree of curvature (pre- and post-surgery), penile pain in erection (pre-surgery), Kelamy's test (preoperative, intraoperative (after hydraulic test), and post-surgery - at the time of the study -erected penile photographic documentation on 3 projections), erectile function assessed through the IIEF-5 score questionnaire (pre- and post-intervention), maintenance of penile straightness at the time of the study, degree of general satisfaction with surgical outcome of procedure and post-operative penile length reduction. The 11 patients interviewed by telephone answered questions on general satisfaction with surgical outcome and penile straightness. None of the patients suffered from congenital penile curvature. We applied the t-student test on the IIEF-5 scores of the pre- and post-intervention questionnaires administered to the 28 examined patients.

Results

76.9% of the 39 interviewed patients retained penile straightness. 82.1% of the 28 examined patients maintained erectile function. The remaining 17.9% presenting a significant reduction in the IIEF-5 score are smoking or diabetic patients. There is no statistically significant difference in the IIEF-5 score between before and after the Nesbit procedure ($p = 0.38$). 85.7% of the examined patients retained the penile length, as per visual comparison of the pre- and post-surgery Kelamy's documentation, despite half of the patients complaining of organ shortening after the procedure. This discrepancy can be explained in the patient's memory of the organ length prior to the disease, to which it refers, and not before surgery. The subjective photographic comparison in this percentage, even by the patient himself, does not confirm this complaint. 53.6% of the examined patients denied alteration of penile sensitivity. 64.1% of the 39 patients were satisfied with the operation. 28.2% report partial satisfaction.

Conclusions

Nesbit's corporoplasty in Peyronie's disease still remains a valid procedure to reduce penile curvature, with satisfactory long-term results (5 years after surgery). The pre- and post-surgical photographic documentation provides help manage the patient's expectations on the surgical outcome.

Lo studio ha avuto finanziamenti: No

Codice: **C34**

RISK OF UNFAVORABLE OUTCOMES AFTER PENILE PROSTHESIS IMPLANTATION – RESULTS FROM A NATIONAL REGISTRY (INSIST-ED)

Capogrosso Paolo, Bettocchi Carlo, Colombo Fulvio, Liguori Giovanni, Fiordelise Stefano, Vitarelli Antonio, Silvani Mauro, Mondaini Nicola, Paradiso Matteo, Ceruti Carlo, Utizi Lilia, Varvello Francesco, Palumbo

Fabrizio, Avolio Antonio, Antonini Gabriele, Pozza Diego, Franco Giorgio, Bitelli Marco, Conti Enrico, Caraceni Enrico, Pescatori Edoardo, Salonia Andrea, Palmieri Alessandro, Dehò Federico

SIA - Società Italiana di Andrologia

Objective Penile prosthesis implantation (PPI) can result in unfavorable outcomes in terms of postoperative complications and low patients' satisfaction. We tested the risk of unfavorable outcomes after hydraulic PPI using data from the multi-institutional national registry of penile prosthesis (INSIST-ED).

Materials and Methods INSIST-ED registry data including patients implanted in 2014-2019 were analyzed. Data have been prospectively recorded on a dedicated website (www.registro.andrologiaitaliana.it) and revised by a data manager. All patients were re-assessed at 1-yr follow-up (FU) using the validated questionnaire Quality of Life and Sexuality with Penile Prosthesis (QoLSPP). Unfavorable outcomes were defined as significant postoperative complications (Clavien-Dindo \geq 2) and/or QoLSPP scores below the 10th percentile. Logistic regression analysis tested the association between clinical characteristics and the risk of unfavourable outcomes after surgery.

Results Overall, 1-yr FU data were available for 256 patients (median (IQR) age 60years (56, 67)) after three-piece PPI. Erectile dysfunction (ED) etiology was pelvic surgery/radiotherapy, organic and Peyronie's disease in 102 (40%), 108 (42%) and 46 (18%) patients, respectively. Of all, 25 (10%) patients experienced complications after surgery. Of 25, 2 (8%) and 10 (40%) patients had Clavien-Dindo 2 and 3 complications, respectively. At 1-yr FU, median (IQR) QoLSPP total score was 65.5 (60, 71); 38 (15%) patients showed unfavourable outcomes because of significant postoperative complications and/or QoLSPP score below the 10th percentile (i.e., <47). At logistic regression analysis, age emerged to be non-linearly associated with the risk of experiencing unfavourable outcomes, with an U-shaped correlation showing lower risk for younger and older patients and higher risk for middle-aged men. ED etiology and surgical volume were not associated with PPI outcomes.

Conclusions Unfavorable outcomes in terms of both postoperative complications and low QoL scores are not uncommon after hydraulic PPI. Physicians should be aware that middle-aged men could be at higher risk of being unsatisfied after PPI compared to both younger and older patients.

Lo studio ha avuto finanziamenti: No

Codice: **C35**

THE IMPACT OF IMMEDIATE SALVAGE SURGERY ON CORPOREAL LENGTH PRESERVATION AND QUALITY OF LIFE AND SEXUALITY (QOLSPP) IN PATIENTS WITH PENILE PROSTHESIS INFECTION. A SINGLE INSTITUTE ANALYSIS.

Chiancone Francesco, Francesco Persico, Luigi Pucci, Francesco Bottone, Nunzio Alberto Langella, Fedelini Paolo, Carrino Maurizio

Department of Urology, A.O.R.N. A. Cardarelli (Naples)

Introduction & Objectives Infections are the most common complications of penile prosthesis implantation and are commonly treated with antibiotics and the explantation of the prosthesis. In cases of redo surgery, the infection rate can reach as high as 18%. As a consequence, not all patients underwent simultaneous removal/implant of the penile prosthesis. The aim of this study was to evaluate the impact on corporeal length preservation of immediate salvage surgery in patients with penile implant infection.

Material & Methods In this retrospective study we enrolled 16 patients who underwent penile prosthesis explantation due to infection from January 2017 to September 2020. 9 out of 16 patients (56.25%) underwent immediate re-implantation of a new prosthesis (Group A) while 7 out of 16 patients (43.75%) underwent deferred re-implantation of the device due to personal choice of the patient or due to fear and anxiety of COVID-19 pandemic (Group B). We compared corporal

cavernosa length before and after immediate salvage or delayed reimplantation. Patients' satisfaction after penile prosthesis implantation was assessed using a 37-item version of the QoLSPP (Quality of Life and Sexuality with Penile Prosthesis). Mean values with standard deviations (\pm SD) were computed and reported for all items. Student-t test was used to compare the statistical significance of differences in means. A p-value ≤ 0.05 was considered statistically significant.

Results No significant differences were detected among the two groups regarding baseline and demographics characteristics ($p > 0.05$). Group B patients underwent penile prosthesis implantation 8.43 ± 4.96 months after the explantation. All salvage cases were successful and no major complications occurred. The mean reduction of corporal cavernosa length was 0.61 ± 0.21 cm for Group A and 1.77 ± 0.64 cm for Group B ($p = 0.0002$), respectively. Interestingly, no significant differences were found among the two groups according to QoLSPP questionnaires (four domains: functional, personal, relational, and social) ($p = 0.4188$).

Conclusion We detected a significant reduction in corpora length in the group of patients in which the re-implantation was deferred. However, the clinical importance of this finding is unclear because the satisfaction of these patients remains high. In conclusion, our data suggested that salvage surgery should be offered to patients with penile implant infection, where possible. Counselling plays a critical role in these patients.

Lo studio ha avuto finanziamenti: No

Codice: **C36**

IS THE TYPE OF XENOGRAFT RELEVANT FOR PATIENT'S SATISFACTION AFTER SURGICAL TREATMENT OF PEYRONIE'S DISEASE? A SINGLE-CENTER EXPERIENCE.

A. Fiorillo², L. Bianchi², M. Droghetti², P. Sadini², M. Masetti², P. Piazza², **G. Gentile¹**, V. Vagnoni¹, A. Franceschelli¹, F. Colombo¹

¹ Andrology Unit - Dept of Urology and Gynecology - Univ. Hospital of S. Orsola – Bologna

² Department of Urology, S. Orsola-Malpighi University Hospital, University of Bologna, Italy

Introduction and Objectives Surgical treatment for Peyronie's disease (PD) includes albugineal grafting with xenografts after plaque incision/excision (PEG). The aim of this study is to compare two different types of xenograft (porcine acellular collagen matrix vs. bovine pericardium collagen matrix) assessing functional outcomes and patients' satisfaction.

Materials and Methods From 2010 to 2019, 63 patients with PD underwent corporoplasty with PEG at single tertiary center, using two different xenografts: porcine acellular collagen matrix (25 patients - Group 1) and bovine pericardium collagen matrix (38 patients - Group 2). For long-term evaluation of surgical outcomes multi-disciplinary questionnaires were administered, by phone interview, performed by the same physician. Overall, 53 patients completed the follow up (19 in Group 1 and 34 in Group 2). The following items were considered: correction of penile bending, quality of erection, ability to intercourse, penile shortening, sensitivity. The overall satisfaction and the impact of the intervention on the sexual activity and quality of life were also investigated.

Results Mean patients age at time of surgery was 56 years, mean follow up was 85 months for Group 1 and 32 months for Group 2 (p value 0.1). The 2 groups were homogeneous in terms of co-morbidity and types of curvature. Plaque median size was 27.5 mm (Group 1) and 31 mm (Group 2). Considering that no patient complained significant preoperative erectile dysfunction (DE), we found significant erectile dysfunction (overall value < 17 of the International Index of Erectile Function - IIEF-5) in 37.7 % of patients (p value 0.4). Complete straightening of the penis was obtained in 73.7% (Group 1) and 76.5% (Group 2). Penile shortening occurred in 15 patients in Group 1 (78.9%) and in 27 in Group 2 (79.4%) (p value 0.8). Only 4 major short-term complications were observed: 2 infections, 1 bleeding and ischemia of the glans. Patients' post-operative sexual life was reported as improved in 47.4% of cases in G1 and in 47.1% of cases in Group 2, unchanged in 9 patients in Group 1 (47.4%) and in 10 patients in G2 (29.4%), worsened in 1 patient in Group 1 (5.3%) and in 8 patients in G2 (23.5%).

Conclusions

Corporoplasty with PEG is a safe procedure and no statistically significant differences were found between porcine acellular collagen matrix and bovine pericardium collagen matrix, in terms of surgical outcomes and overall patients' satisfaction.

Lo studio ha avuto finanziamenti: No

Codice: **C37**

ONCO-MICROTESE IN PATIENTS SUFFERING FROM CONCOMITANT TESTICULAR CANCER AND AZOOSPERMIA: A SINGLE-CENTER EXPERIENCE.

Angelo di Giovanni, Lorenzo Cirigliano, Lorenzo De Stefano, Luigi Di Luise, Massimiliano Trivellato, Luigi Napolitano, Roberto La Rocca, Massimiliano Creta, Marco Capece, Alessandro Palmieri.

University Federico II of Naples, Via Sergio Pansini n° 5, Naples, Italy.

Introduction and Objectives Although testicular cancer (TC) accounts for 1% of all tumors, it affects young men between 15 and 35 years old (National Cancer Registration and Analysis Service). At the time of diagnosis, 6-24% of patients with TC were reported to be azoospermic and 50% oligozoospermic. Azoospermic patients suffering from testicular cancer usually undergo radical orchiectomy and likely adjuvant chemotherapy which will impair the already compromised spermatogenesis whether present. The aim of the present study is to provide the outcomes of onco-microTESE in our center case series.

Materials and methods We enrolled 7 patients between 26 and 37 years old affected by testicular cancer and azoospermia. The diagnosis of tumor was made by physical examination, scrotal ultrasound and tumor markers (α FP, β HCG, LDH). All patients were studied for infertility performing two semen analysis and evaluation of testosterone, FSH, LH, estradiol, prolactin. All patients underwent onco-microTESE and followed-up by the sterility center in our hospital after the surgical procedure.

Result In sperm analysis all patients showed azoospermic defects. Four out of seven patients had high FSH and normal LH, the other normal FSH and LH. Final staging consisted of: five T1 seminomas, one T2 mixed germ cell tumour and one T2 pure embryonal carcinoma. Onco-microTESE was performed with the help of an operator microscope and with the aid of a biologist in the surgery room. This technique allows the extraction of seminal tubules from unaffected areas of the tumour-bearing testicle during the primary cancer surgery. Spermatozoa were successfully retrieved and frozen from 2/7 testes (28.57%).

Conclusion Microdissection testicular sperm extraction (microTESE) at the time of radical orchidectomy (onco-microTESE) could be a useful infertility treatment option for those found to be azoospermic at diagnosis of testicular cancer. Despite in our case series the rate of success is inferior to other studies the onco-microteese should be considered the gold standard in such patients.

Lo studio ha avuto finanziamenti: No

Codice: **C38**

TRENDS IN REPORTED MALE SEXUAL DYSFUNCTION OVER THE LAST DECADE: THE EVOLVING LANDSCAPE

Paolo Capogrosso^{1,2}, Luca Boeri^{2,3}, Walter Cazzaniga^{1,2}, Eugenio Ventimiglia^{1,2}, Edoardo Pozzi^{1,2}, Nicolò Schifano^{1,2}, Luigi Candela^{1,2}, Davide Oreggia^{1,2}, Federico Belladelli^{1,2}, Andrea Baudo^{1,2}, Federico Deho², Costantino Abate², Francesco Montorsi^{1,2}, Andrea Salonia^{1,2}

¹ Università Vita-Salute San Raffaele, Milan, Italy

² Division of Experimental Oncology/Unit of Urology; URI; IRCCS San Raffaele Scientific Institute, Milan, Italy

³ Department of Urology, Foundation IRCCS Ca' Granda – Ospedale Maggiore Policlinico, University of Milan, Milan, Italy

Objective Rates of reported sexual dysfunction (SD) over time could have changed as a consequence of evolving public awareness and

the advent of novel effective treatments. We investigated changes in pattern of reported SD over time at a single center.

Materials and Methods Data of 3244 patients consecutively assessed for the first time by a single sexual medicine expert in 2009-2019 have been analyzed. All patients were assessed with a comprehensive medical history. Comorbidities were scored with the Charlson Comorbidity Index (CCI). Primary reason at first assessment was recorded and categorized as erectile dysfunction (ED), premature ejaculation (PE), Peyronie's disease (PD), and low sexual desire/interest (LSD/I). Linear and logistic regression models tested the association between different reasons for seeking medical help and the time at first evaluation. Local polynomial regression model explored the probability of reporting different SD over time.

Results Median (IQR) age at first clinical assessment was 47 (33,59) years. Overall, most patients were assessed for ED [824 (36.8%)], followed by LSD/I [490 (21.9%)], PE [469 (20.9%)], and PD [458 (20.4%)]. We observed significant changes in terms of reported SD over the analyzed time frame (Fig. 1). The likelihood of assessing patients for ED significantly increased up to 2013, with a decrease in the last 5 years ($p < 0.0001$). PE assessment at presentation linearly decreased over time (OR:0.94; 95%CI:0.91-0.96; $p < 0.001$). Patients assessed in the last few years were more likely to report PD (OR:1.30; 95%CI:1.24-1.35; $p < 0.001$) and LSD/I (OR:1.32; 95%CI:1.27-1.38; $p < 0.001$) with a linear increase over the evaluated timeframe. Patients assessed in more recent years were younger (Coeff:-0.15; 95%CI:-0.31-0.01; $p = 0.04$), presented with less comorbidities [$CCI \geq 1$ (OR:0.93; 95%CI:0.91-0.95; $p < 0.001$)], were more likely current smokers (OR:1.11; 95%CI:1.08-1.13; $p < 0.001$), but to report regular physical activity (OR:1.03; 95%CI:1.02-1.06; $p < 0.001$).

Conclusions The landscape of patients seeking help for SD has changed in the last 10-yr time frame. These results may reflect changes in public awareness toward different SD and the possible impact of the advent of novel effective treatments on the market over the same time frame.

Lo studio ha avuto finanziamenti: No

Codice: **C39**

CONVERSION OF LOW-FLOW TO HIGH-FLOW PRIAPISM: A CASE REPORT.

Fulvio Colombo¹, Valerio Vagnoni², Giorgio Gentile¹, Franco Palmisano¹, Alessandro Franceschelli¹.

1 S.S.D. Andrologia, Azienda Ospedaliero-Universitaria - Policlinico di S.Orsola, Bologna, Italia.

2 U.O. Urologia, Azienda Ospedaliero-Universitaria - Policlinico di S.Orsola, Bologna, Italia.

Introduction and objectives We describe a rare and interesting case of conversion of low-flow priapism to bilateral high-flow priapism after surgical manipulation.

Materials and Methods A 40-year Caucasian diabetic male presented to the emergency room at our institution with an idiopathic erection lasting over than 72 hours. Previously, the patient underwent an unsuccessful drainage of the corpora cavernosa and intracavernous injection of alpha-mimetic drug at another institution.

Results The patient denied drug use, known hematologic conditions or genital trauma. At the presentation, physical examination showed a painful complete erection of both corpora cavernosa while the gland was not tumescent; a penile arterial blood gas from the apex of the corpora cavernosa revealed hypoxia and acidosis, values suggestive for ischemic priapism. A corpora cavernosa shunt (T-shunt) with tunneling was performed using sequential Hegar dilators (up to 10F diameter). Detumescence was obtained intraoperatively at the level of the proximal 2/3 of the penis while mild corporal fibrosis remained at the distal 1/3 of the penile shaft. Surprisingly, on post-op day 4, the penis showed an attitude of resumption of a quite complete non-painful erection. A corporal blood gas was taken with the values consistent with a high-flow state. A penile duplex Doppler study confirmed an arterial high flow and a selective pudendal angiogram was performed with the evidence of some possible fistulous lesions apparently originating from both the bulbar artery and the cavernous artery. After appropriate selective catheterization, embolization was carried out with fibrin sponge fragments obtaining the closure of the treated branches with conservation of the flow in all the remaining branches.

After 72 hours without a renewing erection, the patient was discharged.

After 2 months follow-up, he didn't achieve satisfactory erections for sexual intercourse due to a diffuse fibrosis of the corpora cavernosa confirmed with a MR imaging of the penis. For this reason, the patient underwent penile three components prosthesis implantation with a definitive optimal functional outcome.

Conclusions Among men treated for low-flow priapism, a renewing erection can make difficult to distinguish pain from recent procedure and ischemia so that a penile Duplex Doppler study and a pudendal angiogram appear essential for the management of the patient.

Lo studio ha avuto finanziamenti: No

Codice: **C40**

TRATTAMENTO TRIMODALE PER LA DISFUNZIONE ERETTILE: COMBINAZIONE DI ONDE D'URTO A BASSA INTENSITA' (LI-ESWT), INIEZIONI

Antonio Ruffo¹, Francesco Trama⁴, Nikola Stanojevic², Giuseppe Romeo³, Filippo Riccardo⁴, Fabrizio Iacono⁴

1 Andrea Grimaldi Medical Care, Urology, Naples, Italy,

2 Sava Perovic Foundation, Belgrade, Serbia,

3 A.O.R.N. Antonio Cardarelli, Urology, Naples, Italy,

4 University of Naples Federico II, Urology, Naples, Italy

Introduzione e obiettivi Numerosi studi hanno già dimostrato che la terapia con onde d'urto a bassa intensità (Li-ESWT) può avere un effetto positivo negli uomini con disfunzione erettile (DE). Tuttavia non abbiamo ancora un protocollo valido da applicare a tutti i pazienti e spesso i disturbi erettili persistono ancora in molti dei pazienti trattati. Il plasma ricco di piastrine (PrP) è utilizzato in molti campi medici per le sue proprietà nella rigenerazione e riparazione tissutale rilasciando molti fattori di crescita, come IGF-1, BDNF e VEGF.

Il nostro obiettivo è stato quello di indagare gli effetti della terapia combinata di onde d'urto, iniezioni intercavernose di PrP e Vacuum device per il trattamento della DE.

Materiali e metodi In questo studio prospettico, randomizzato, controllato, 134 pazienti sono stati arruolati e suddivisi in due gruppi : Gruppo A (58 pts) sottoposti a Li-ESWT (2 sessioni a settimana) per 5 settimane; Gruppo B (76 pts) sottoposti a terapia combinata di Li-ESWT (2 sessioni settimanali) per 5 settimane, iniezioni intracavernose di PrP (una volta/settimana) per 5 settimane e fisioterapia con Vacuum device (15 min/giorno per 3 mesi). Il PrP è stato ottenuto da campioni di sangue venoso con doppia centrifugazione, primo spin rapido a 6.000 giri per 7 minuti, secondo spin a 3.000 giri per 3 minuti. Il PrP ottenuto viene poi iniettato direttamente nei corpi cavernosi con una sola iniezione. I principali outcome registrati: la funzionalità erettile (valutata attraverso il questionario IIEF5) e la velocità di picco sistolica (VPS) delle arterie cavernose. Il follow-up dei pts è stato eseguito dopo 12 e 24 settimane. I test di Mann-Whitney e Wilcoxon con $p < 0,05$ sono stati utilizzati per analizzare i dati.

Risultati In entrambi i gruppi, a 12 e a 24 settimane di follow-up, si è evidenziato un miglioramento statisticamente significativo sia del punteggio medio dell'IIEF che della media del VPS. L'analisi intergruppo ha rivelato un punteggio IIEF e della VPS maggiore nel Gruppo B che hanno ricevuto la combinazione ($p < 0,03$; $p < 0,001$ rispettivamente) (Tabella 1). A 24 settimane : Gruppo A IIEF score da 15.6 (11-17) a 18.8 (15-22), VPS da 24.4 ± 11.4 a 32.6 ± 8.4 mentre Gruppo B : IIEF score da 14.5 (10-16) a 21.8 (18-23), VPS da 25.6 ± 9.4 a 42.8 ± 9.8 .

Conclusioni Il protocollo combinato di Li-ESWT più iniezioni intracavenose di PrP più Vacuum device può rappresentare una valida strategia terapeutica per il trattamento della DE

Lo studio ha avuto finanziamenti: No

Codice: **C40a**

HOW LONG DOES THE PAIN LAST AFTER INFLATABLE PENILE PROSTHESIS IMPLANTATION? DATA FOR A INFORMED PATIENT COUNSELLING AND A TAILORED PAIN THERAPY

Carlo Ceruti, Marco Falcone, Lorenzo Bertolino, Omid Sedigh, Massimiliano Timpano, Mattia Sibona, Mirko Preto, Luigi Rolle, Paolo Gontero

University Of Turin
Città della Salute e della Scienza di Torino

Introduction No studies focus specifically on pain after inflatable penile prosthesis implantation (IPP); consequently, patient information and pain killing strategy are often not suggested by evidence based data. We performed a prospective observational study with long term follow up to assess intensity, duration and predictors of pain after IIP and their impact on patient's recovery,

Methods 45 consecutive patients who underwent IPP implantation were enrolled and prospectively followed up. 22 patients underwent a simple implantation (group 1), 23 implantation plus additional maneuvers, typically for straightening and lengthening (group 2). Pain assessment was performed basing on a 10-level Numerical Rating Scale (NRS) at different timepoints until a long term follow up visit at 24 months. Surgical and functional outcomes were evaluated with medical examination, structured interviews, IIEF and EDITS inventories.
Statistics: Univariable: Chi-square, Fisher, T-test, Mann Whitney. Multivariable: multiple linear regression, multiple logistic regression.

Results 1 infection and 1 mechanical failure occurred; 23 Clavien I complications were reported (essentially various degree of hematoma).

16 patients needed a pain rescue therapy; median analgesic discontinuation time was 14 days (group 1: 10, group 2: 17) Half of the patients stopped having pain only during the second month (Fig. 1). 5 patients still had pain at 6 months and continued until long term follow up.

Patients achieved to activate the pump after a median time of 33 days and had intercourses after 42. At long term median EDITS score was 75%; 6 patients declared themselves not completely satisfied; unsatisfaction resulted associated with chronic pain ($p=0.01$).

Outcomes were similar between groups except analgesic discontinuation time ($p=0.03$). Hematoma resulted predictor of a longer need for analgesics ($p<0.01$).

Request for rescue therapy ($p<0.01$) correlated with longer time to first activation and with longer time to first intercourse ($p=0.03$).

Conclusions Patients should be awarded that pain usually stops during the second month; complex surgery results in a prolonged need of pain killers. Hematoma and early postoperative pain are predictors of longer lasting pain and later sexual recovery, so these patients should be provided with adequate pain killers prescriptions and counselling. Chronic pain is a possible problem and correlates with poor satisfaction.

Lo studio ha avuto finanziamenti: No

Codice: **C40b**

TIME DELAYS IN TREATMENT OF ACUTE TESTICULAR TORSION: THE POTENTIAL IMPACT OF COVID-19 PANDEMIC.

Francesco Chiancone, Francesco Persico, Marco Fabiano, Maurizio Fedelini, Luigi Pucci, Francesco Bottone, Clemente Meccariello, Maurizio Carrino, Paolo Fedelini

Department of Urology-AORN A.Cardarelli-Naples

Introduction and objectives Testicular torsion affects 3.8 per 100,000 males younger than 18 years annually. Delayed treatment increase the risk of orchiectomy and may promote damage to fertility. We aimed to evaluate the factors associated with a delay in surgery of patients with a testicular torsion.

Material and Methods From September 2019 to December 2020, 28 patients with testicular torsion reached our Emergency Department. They underwent surgical exploration and spermatic cord derotation. All data were collected in a prospectively maintained database and retrospectively analyzed. Descriptive statistics of categorical variables focused on frequencies and proportions. Mean values with standard deviations (\pm SD) were computed and reported for continuous variables.

Results The mean age of patients was 18.61 ± 3.27 years. The average time from presentation to theatre was 242.86 ± 125.96 minutes. Delay in scrotal exploration >6 hours increased the risk of orchiectomy (6 patients, 100%). 2 out of 4 patients (50%) in which the waiting time for surgery was 5 hours needed orchiectomy. A surgical exploration performed within 4 hours from clinical presentation guaranteed 44.4% (8 out 18 patients) of testicular salvage. Reasons for surgical delay (5 and 6 hours) were: transfer from peripheral hospital (1 patients), misdiagnosis (2 patients), fear of contagion regarding COVID-19 infection (3 patients) and representation after manual detorsion of testis (2 patients).

Conclusion Literature data demonstrated that testicular function after testicular torsion can be impaired. Manual detorsion of testes can be also performed after the diagnosis. Despite this all patients should undergo also prompt scrotal exploration and testicular fixation. In our experience, two patients returned at the Emergency Department after manual detorsion of testis for a recurrent torsion during the first 24 hours. Moreover, special attention should be paid to differential diagnosis with inflammatory conditions of the testis like epididymitis. Finally, the COVID-19 pandemic has caused significant reduction to first care due to the fear of a greater risk of contagion regarding infection. Delay in management of urological emergency is a globally recognized phenomenon. During the last year, COVID-19 pandemic contributed to significantly higher rates of orchiectomy for spermatic cord torsion. Increasing adolescents' knowledge of this condition could help to not neglect the testicular pain.

Lo studio ha avuto finanziamenti: No

Codice: **C41**

CLOMIPHENE CITRATE AND FSH TREATMENT IN MEN WITH ELEVATED SPERM DNA FRAGMENTATION INDEX: FINDINGS FROM A CROSS-SECTIONAL STUDY

Luca Boeri^{1,3}, Paolo Capogrosso¹, Walter Cazzaniga¹, Eugenio Ventimiglia¹, Edoardo Pozzi¹, Federico Belladelli^{1,2}, Nicolò Schifano¹, Luigi Candela¹, Massimo Alfano¹, Costantino Abate¹, Emanuele Montanari³, Francesco Montorsi^{1,2}, Andrea Salonia^{1,2}

¹ Division of Experimental Oncology/Unit of Urology; URI; IRCCS Ospedale San Raffaele, Milan, Italy

² University Vita-Salute San Raffaele, Milan, Italy

³ Department of Urology, Foundation IRCCS Ca' Granda – Ospedale Maggiore Policlinico, University of Milan, Milan, Italy

Introduction & objectives Sperm DNA fragmentation index (SDF) has been associated with impaired spermatogenesis and infertility. Clomiphene citrate (CC) and FSH treatment (either highly purified FSH (uhFSH) and recombinant human FSH (rhFSH)) have been used to empirically improved sperm quality, but their effect on

SDF is relatively poorly studied. We cross-sectionally analyzed the effect of CC and FSH treatment on SDF in men presenting for primary couple's infertility.

Materials and Methods Data from 433 men treated with either CC (n=370, 85.5%) or FSH (n=63, 14.5%) for pathologic SDF were analyzed. Semen analysis, SDF (according to SCSA) and serum hormones were measured in every patient; health-significant comorbidities were scored with the Charlson Comorbidity Index (CCI). Pre vs. post treatment semen analysis, SDF were evaluated with paired t-test. Logistic regression analysis was used to test potential predictors of DFI improvement after treatment.

Results Overall, median (IQR) age, FSH and SDF were 37.5 (24, 64) years, 4.8 (2.8, 5.0) mIU/mL and 43.5% (33.2, 61.4), respectively. At first post-treatment (any) assessment, an improvement in terms of SDF, sperm concentration, percentage of progressive motility and of normal morphology was observed in 36 (60%), 167 (52.5%), 152 (54.9%), and 154 (57%) men, respectively. SDF rate was significantly reduced after treatment (any) (44.9 vs. 52.5%; mean post vs. pre change -7.6; p=0.001). Conversely, sperm concentration (12.3 vs. 15.0x10⁶/mL) and progressive motility (18.6 vs. 19.1%) were slightly but not significantly improved after treatment (any). Both CC (p=0.001) and FSH (p=0.04) therapy significantly improved SDF levels, with a higher improvement after CC compared to FSH treatment (-12.5 vs. -2.5; p=0.01). ROC curves revealed that baseline SDF>35% could predict SDF improvement after treatment, with 97% sensitivity and 71% specificity. At multivariable logistic regression analysis, only a baseline SDF>35% was associated with SDF improvement after treatment, after accounting for age, BMI, serum FSH and smoking status.

Conclusions Both CC or FSH treatment improved SDF in primary infertile men. Patients who benefit most are those with higher baseline SDF, with SDF>35% as a possible clinical cut-off.

Lo studio ha avuto finanziamenti: No

Codice: **C42**

LE RAMIFICAZIONI DELLE ARTERIE CAVERNOSE, STUDIATE MEDIANTE POWER-DOPPLER US: CONSIDERAZIONI SULL'ETIOPATOGENESI DELL'IMPOTENZA ERETTILE VASCULOGENICA

Fabio Pezzoni¹, Fabrizio Ildefonso Scroppoz

¹ Spec.in Chir. Vascolare Uni-Milano-Socio SIA

² Dipartimento di Andrologia-Osp. di Circolo-Varese

Obiettivi il buon funzionamento della "unità terminale cavernosa" (UTC) (aa elicine, aa dei setti, struttura dei setti) è valutabile con Eco-color-Doppler dinamico (ECD) e Power Doppler (PD). Le alterazioni numeriche delle "arborizzazioni" identificabili di norma fino al 3° ordine e l'orientamento rispetto al tronco principale (normalmente formano distalmente un angolo acuto) giustificerebbero di frequente la presenza di disfunzioni "veno-occlusive cavernose" (DVO).

Materiali e Metodi studiati dal 07/2014 al 07/2019, 218 pz (età media 45.9) affetti da Disfunzione Erettile (DE), IIEF medio=13.5, con normali parametri velocimetrici ed ecostrutturali sulle cavernose. PD applicato sulle cavernose in fase dinamica (ICI PGE1 20mcg+6mg Papaverina) per valutare le "arborizzazioni" fino al 3° ordine e la loro inclinazione rispetto al tronco principale. Cavernosometrie Dinamiche (CAV) eseguite con "cavernopompa peristaltica ad alta velocità" valutando Flusso Raggiungimento Erezione, Flusso Mantenimento Erezione, Indice Mantenimento Erezione e soprattutto il dato clinico di rigido erezione normomantenuta o meno.

Risultati 96pz sottoposti a CAV (44%) dopo l'insuccesso dell'ICI test; in 42 (43.7%) la CAV è risultata positiva per DVO. 22pz (52.3%) presentavano significative alterazioni sia del n/o delle "arborizzazioni" (di norma visibili fino al 3° ordine) sia del loro orientamento rispetto al tronco principale, con tendenza ad un decorso perpendicolare (normalmente esse formano distalmente un angolo acuto). In 54pz (56.2%) la CAV è risultata normale, negativa per DVO; in 106 (48.6%) non è stata eseguita per esito positivo dell'ICI test (erezione rigida normomantenuta). 16pz devono

ancora eseguire la CAV(7.4%).Nei 160pz in assenza di DVO reperto di normalità al PD in 126(78.8%),patologico in 34(21.3%)con significatività *p<0.05patologici vs normali.

Conclusioni il PD si è dimostrato efficace ed altamente specifico per escludere la presenza di DVO.Contrariamente le alterazioni ischemiche e/o morfologiche della UTC giustificerebbero l'etiopatogenesi di molte DVO.

Lo studio ha avuto finanziamenti: No

Codice: **C43**

SURGICAL OUTCOME AFTER PENILE INVERSION VAGINOPLASTY: A RETROSPECTIVE STUDY OF 102 TRANSGENDER WOMEN

Girolamo Morelli¹, **Andrea Cocci**², Valeria Matteucci¹, Simone Grisanti Carossai², Augusto Delle Rose², Polito Chiara¹, Francesco Rosi¹, Davide Frediani¹, Jacopo Durante¹, Tommaso di Vico¹, Gianmartin Cito², Riccardo Bartoletti¹, Marco Carini², Sergio Serni², Andrea Minervini², Francesco Francesca¹

¹ Cisanello Hospital, University of Pisa

² Careggi Hospital, University of Florence

Introduction and objectives For many transgender women, vaginoplasty is the final stage in the gender-confirming process. Penile inversion vaginoplasty is considered the gold standard for vaginal construction in transgender women. In this study, we describe the intraoperative and postoperative complications after penile inversion vaginoplasty.

Materials and methods All patients who underwent penile inversion vaginoplasty between April 2017 and April 2019 were identified retrospectively. A retrospective chart review was conducted. Outcome measures were intraoperative and postoperative complications, reoperation and secondary surgical procedures.

Results Between April 2011 and April 2019 102 patients underwent penile inversion vaginoplasty, all patients have additional scrotum full-thickness skin grafts. The median patient age at surgery was 35 years (range, 16 to 65 years). Median follow-up was 13 months (range, 1 to 35 months). The most severe observed intraoperative complications were rectal injury (1 patient) and a urethral injury (1 patient). 2 patients had a necrosis of the neo-gland due to damage to the nerve vascular bundle. Short-term postoperative bleeding that required transfusion [4 patients], without necessity of reoperation. 2 patients had a severe hematoma of the neo vagina without necessity of drainage. Only one patient experienced vaginal evagination in the first day due to the mobilization without permission of the health personnel, the vagina was repositioned with the use of a new swab at the patient's bed without the need for intervention. .No post operative major complications were reported. Stricture of the vagina tunnel was report in 9 patients with necessity of reoperation with Colon-Vaginoplasty . Revision vaginoplasty was performed in 6 patients for esthetic reasons. Hight BMI was associated with a higher risk stricture.

Conclusions Successful vaginal construction without the need for secondary functional reoperations was achieved in the majority of patients. Intraoperative complications are scarce. Postoperative complications occur but are generally minor and easily treated.

Lo studio ha avuto finanziamenti: No

Codice: **C44**

THE OUTCOMES OF THE RADIAL ARTERY FOREARM FREE-FLAP FOR TOTAL PHALLIC RECONSTRUCTION: A FOCUS ON VASCULAR COMPLICATIONS

Marco Falcone, Mirko Preto, Lorenzo Bertolino, Massimiliano Timpano, Ceruti Carlo, Omidreza Sedigh, Paolo Gontero

AOU Città della Salute e della Scienza - S.C. Urologia

Introduction and aim Several conditions may require a total phallic reconstruction (TPR). TPR is a challenge for reconstructive surgeons. Our aim is to assess the surgical outcomes of the radial artery forearm free-flap

(RAFFF), focusing on postoperative vascular complications.

Materials and methods A consecutive series of patients underwent a TPR using a RAFFF in a single tertiary referral center were enrolled. Data were retrospectively extrapolated. Flap was prepared by the same surgical team. Flap baseline features and the postoperative vascular complications were reported. RAFFF relies on the radial artery and on veins draining superficial and deep system. The cephalic vein and other two superficial veins in the postero-radial and ulnar side of the flap were dissected. After the inseting and the arterial anastomosis, the suture of the cephalic vein to the great safena was performed. The veins with the higher blood reflow were chosen to be sutured to the accessory safena vein or the venae comitantes of the epigastric artery. At least 2 or 3 vein sutures were performed depending by the flap requirement. A univariate analysis was conducted to identify predictive values for vascular complications.

Results 21 patients were enrolled. 5 were genetic males, the remainders were transgender. Median follow-up was 20 months. Age was 32. BMI was 24. 33.3% of patients were smoker. Flap measures: phallus 13 cm base, 8.5 cm tip and 14 cm length; urethra 4 cm width and 17 cm length. Tourniquet time was 105 minutes. Median flap veins were 2. A connection between superficial and deep venous system into the cephalic vein was present in all cases. Vascular complication occurred in 28.6%. A localized arterial ischemia of the ventro-proximal portion of the flap occurred in 2 cases and it was managed by debriding and local flap reconstruction. An extended ventral necrosis, due to lateral flap venous ischemia occurred in 3 patients. This was managed by early debridement and local flap reconstruction in 1 case. An additional flap reconstruction was needed in remainders. An acute arterial thrombosis occurred in 1 case and it caused the loss of the neo-phallus. The univariate analysis evidenced as the only predictive values of vascular complications the number of flap veins (<2).

Conclusions Despite the incidence of vascular complications, RAFFF is a reliable flap for TPR. Respecting its venous vascular anatomy may be the key-point to optimize the outcomes of the reconstruction.

Lo studio ha avuto finanziamenti: No

Codice: **C45**

INFERTILE MEN HAVE HIGHER PSA VALUES THAN AGED-MATCHED FERTILE CONTROLS: POTENTIAL IMPLICATIONS FOR PERSONALIZED PREVENTION STRATEGIES

Luca Boeri^{1,2}, Paolo Capogrosso², Walter Cazzaniga², Massimo Alfano², Filippo Pederzoli², Edoardo Pozzi², Federico Belladelli², Andrea Baudo², Eugenio Ventimiglia², Costantino Abate², Emanuele Montanari¹, Francesco Montorsi², Andrea Salonia²

¹ Department of Urology, Foundation IRCCS Ca' Granda – Ospedale Maggiore Policlinico, University of Milan, Milan, Italy

² Division of Experimental Oncology/Unit of Urology; URI; IRCCS San Raffaele Scientific Institute, Milan, Italy

Introduction and objectives Infertile men are at greater risk of oncologic and non-oncologic chronic disease than the fertile of comparable age. Thereof, male factor infertility (MFI) may be considered an identifiable early sentinel marker for the development of prostate cancer (PCa). We investigated serum PSA levels in a cohort of men presenting for MFI compared to a cohort of aged-matched fertile controls, according to the EAU recommendation that a first PSA assessment should be obtained at 40-45 years of age.

Materials and methods Data from 940 (90.2%) MFI men and 102 (9.8%) fertile controls were analyzed. Groups were matched by age using propensity score weighting. Comorbidities were scored with the Charlson Comorbidity Index (CCI). According to EAU recommendations, patients were segregated as younger (group 1) and older >40 years (group 2). Serum hormones, serum PSA and semen parameters were investigated in every man. Descriptive statistics and logistic regression models tested potential associations with PSA levels.

Results Median (IQR) age, BMI and total PSA were 38 (35, 43) years, 25.0 (23.3, 26.9) kg/m² and 0.7 (0.5, 1.1) ng/mL in the whole cohort, respectively. Median PSA (0.7 vs. 0.6 ng/mL, p=0.03), CCI (0.8 vs. 0.1, p=0.03) and FSH (6.0 vs. 4.0 mIU/mL, p<0.001) values were higher and total testosterone (4.4 vs. 4.9 ng/mL, p=0.003) was lower in

infertile than fertile group. Overall, a PSA value >1 ng/mL was found in 310 (29.8%) men. A higher rate of PSA >1 ng/ml was found in infertile than fertile men (30.4% vs. 19.6%, $p=0.02$). Among infertile men, sperm concentration (19.5 vs. 28.3 mil/ml, $p=0.008$) was lower in patients with PSA >1 ng/mL than those with PSA <1 ng/mL. Among fertile patients, no differences were observed according to PSA levels. Group 1 patients had lower PSA than in group 2 (0.8 vs. 1.1 ng/ml, $p=0.001$). Of all, 153 (25.5%) group 1 patients had PSA >1 ng/mL. More group 1 infertile men than fertile controls had PSA >1 ng/ml (26.9% vs. 15.8%, $p=0.03$). At MVA logistic regression analysis infertility status (OR 1.96, $p=0.04$) was the only independent predictor for serum PSA >1 ng/mL in group 1, after accounting for testosterone level and CCI.

Conclusions This case-control analysis showed that infertile men have higher PSA values than age-matched fertile controls. Of all, almost one out of three infertile men younger than 40 years have a first total PSA value greater than 1 ng/mL.

Lo studio ha avuto finanziamenti: No

Codice: **C46 – ASSENTE**

Codice: **C47 – ASSENTE**

Codice: **C48**

TESTICULAR SPERM EXTRACTION (TESE) FOR ASSISTED REPRODUCTION IN INFERTILE PATIENTS WITH ZINNER SYNDROME

Luca Gemma, Gianmartin Cito, Andrea Cocci, Nicola Laruccia, Pierangelo Verrienti, Roberto Di Costanzo, Fabrizio Di Maida, Alice Livoti, Elena Di Virgilio, Simone Sforza, Lorenzo Masieri, Andrea Minervini, Marco Carini, Alessandro Natali

Department of Urology, University of Florence, Florence, Italy

Introduction and objectives Zinner syndrome (ZS) is one of the rarest congenital anomalies of the urogenital tract characterized by seminal vesicle obstruction, ipsilateral renal agenesis, and ipsilateral obstruction of ejaculatory duct, due to Wolffian duct anomalies. It is likely that sperm evaluation reveals an absolute azoospermia. It could be an obstructive azoospermia but also a secretory damage might be develop due to a long-lasting obstruction to sperm outflow. Our aim is to evaluate the outcomes of surgical sperm retrieval in patients with ZS.

Materials and Methods We collected data of two Caucasian men, who attended our center for primary couple infertility. A complete uro-andrological work-up assessment was performed. Both patients were scheduled for conventional multiple testicular sperm extraction (TeSE) and cryopreservation.

Results Mean duration of couple infertility was 24 months. Both patients did not report previous surgery or ongoing pathologies. Sperm analysis showed absolute azoospermia. Patient 1: The patient was 27 and his partner 29 years old. Physical examination found testicular volume of 25 ml bilaterally, and dilatation of right vas deferens and epididymis. Scrotal, transrectal and abdominal ultrasounds (US) showed dilatation of right epididymis, left seminal vesicle agenesis, right seminal vesicle severe hypotrophy and absence of right kidney respectively. FSH was 3.2 IU/L, LH 5.2 IU/L, total testosterone (TT) 22.3 nmol/L. The patient performed right TeSE: sperm concentration was 0.01x 106/ml, sperm motility 1%, biosystem straws cryopreserved were 5. Patient 2: The patient was 27 and his partner 25 years old. Testicular volume was 10 ml bilaterally. FSH was 32.0 IU/L, LH 16.3 IU/L, TT 9.0 nmol/L. Transrectal and abdominal US showed left 65 x 46 mm-seminal vesicle cyst, enlargement of the right seminal vesicle and left kidney agenesis. The patient underwent robot-assisted left vesiculectomy. At 12 months follow-up, semen analysis confirmed azoospermia. Bilateral TeSE was performed: sperm concentration was 0.001x

106/ml, sperm motility 1%, biosystem straws cryopreserved were 3.

Conclusion TeSE represents a successful option to recovery sperm in patients with ZS. Although azoospermia is due to an obstruction of the seminal tracts, there may also be a secretory damage linked to disembryogenesis process. For this reasons, it is advisable to program TeSE with cryopreservation than fresh on the same day of oocyte retrieval.

Lo studio ha avuto finanziamenti: No

Codice: **C49**

SHBG LEVELS IN PRIMARY INFERTILE MEN: A CRITICAL INTERPRETATION IN THE EVERYDAY CLINICAL PRACTICE

Luca Boeri^{1,2}, Paolo Capogrosso², Walter Cazzaniga², Eugenio Ventimiglia², Edoardo Pozzi², Federico Belladelli², Andrea Baudò², Nicolò Schifano², Luigi Candela², Giuseppe Fallara², Costantino Abate², Emanuele Montanari¹, Francesco Montorsi², Andrea Salonia²

¹ Department of Urology, Foundation IRCCS Ca' Granda – Ospedale Maggiore Policlinico, University of Milan, Milan, Italy

² Division of Experimental Oncology/Unit of Urology; URI; IRCCS San Raffaele Scientific Institute, Milan, Italy

Introduction and objectives The testosterone (T) status of a man is influenced by serum concentrations of sex hormone-binding globulin (SHBG). A huge variability in SHBG values related to age and body mass index (BMI) has been observed in men with sexual dysfunction. We aimed to test the association between age, BMI and SHBG in a cohort of men presenting for primary couple's infertility.

Materials and Methods Data from 1547 infertile men were analysed. Health-significant comorbidities were scored with the Charlson Comorbidity Index (CCI). Serum hormones were measured in every patient. Age was considered according to quartile groups (<33, 33-41, >41 years) and BMI as normal weight (18.5-24.9 kg/m²), overweight (25.0-29.9 kg/m²) and obesity (>30 kg/m²). Descriptive statistics and linear regression analysis tested the associations between age and BMI and SHBG.

Results Median SHBG values increased across quartiles of age and decreased with BMI (all $p < 0.001$). For each unit increase in BMI, SHBG decreased by 1.1 nmol/l, while for each year increase in age, SHBG increased 0.32 nmol/l (all $p < 0.001$). The progressive decline in SHBG with increasing BMI was greater than the progressive increase in SHBG with age. Overall, BMI explained 3.0 times more of the variability in SHBG than did ageing. In the multivariate linear model, age and BMI were the most significant factors influencing SHBG concentration (all $p < 0.001$) after accounting for CCI, albumin levels and smoking status.

Conclusions We found a wide distribution of SHBG concentrations across age and BMI in infertile men. The association between BMI and lowered SHBG seems to be greater than the association of ageing with increased SHBG.

Lo studio ha avuto finanziamenti: No

Codice: **C50**

PRESERVAZIONE DELL'EIACULAZIONE POST LINFOADENECTOMIA RETROPERITONEALE ROBOT ASSISTITA (RA-RPLND) PER MASSA RESIDUA DA TUMORE DEL TESTICOLO

G. Quarto¹, A. Izzo¹, L. Castaldo¹, G. Grimaldi¹, R. Muscariello¹, D. Franzese², S. Rossetti³, S. Perdonà¹

¹ U.O.C Di urologia Istituto Nazionale Tumori Fondazione G. Pascale-IRCCS, Naples, Italy.

² Urologic Section, Department of Neurosciences, Sciences of Reproduction, and Odontostomatology, University of Naples Federico II, Naples, Italy.

³ Departmental Unit of Experimental Uro-Andrologic Clinical Oncology, Istituto Nazionale Tumori Fondazione G. Pascale-IRCCS, Naples, Italy.

Introduzione Il trattamento chirurgico delle masse residue post chemioterapia del tumore a cellule germinali (GGT) può essere eseguito con varie tecniche. In questo studio valutiamo la fattibilità e l'efficacia nella preservazione dell'eiaculazione della dissezione linfonodale retroperitoneale robot assistita in posizione supina.

Materiali e metodi Abbiamo analizzato i dati raccolti retrospettivamente di 12 pazienti sottoposti a RPLND post-chemioterapia tra marzo e novembre 2019 per masse residue di CGT > 1 cm per i non seminomi e >3 cm e PET captanti per quanto riguarda i seminomi in accordo con le linee guida nazionali e internazionali. L'età media dei pazienti trattati è 34 anni. Otto pazienti avevano una diagnosi di tumore non seminomatoso delle cellule germinali (NSGCT) del testicolo e 4 di seminoma puro. Tutti i pazienti hanno ricevuto tre o quattro cicli di chemioterapia secondo schema BEP a dose piena per la loro malattia in stadio IIB -IIC prima dell'intervento chirurgico. 8 pazienti hanno ottenuto Risposta Parziale (RP) e 4 pazienti Stabilità (SD). Sono stati rilevati parametri perioperatori (tempo di intervento, perdita di sangue e complicanze intraoperatorie), risultati postoperatori (ematocrito, durata ricovero e complicanze postoperatorie) e outcome andrologico inteso come conservazione dell'eiaculazione. Sono stati studiati gli esiti patologici e l'imaging radiologico postoperatorio.

Risultati La RPLND è stata completata con successo in tutti i pazienti e nessuno di loro ha richiesto la conversione in chirurgia aperta. Il tempo di intervento medio è stato di 309 minuti (intervallo, 275-360) e la perdita media di sangue stimata è stata di 280 ml (intervallo, 150-550). Un paziente ha richiesto trasfusione postoperatoria a causa di una lesione sulla vena cava suturata intraoperatoriamente. L'esame istologico dei campioni ha rivelato necrosi in 4 e teratoma maturo in 8 pazienti. Il tempo mediano di ricovero dopo l'intervento è stato di 3 giorni. Durante un follow-up non vi sono state recidive retroperitoneali o metastasi a distanza nell'imaging radiologico. Non si sono verificate complicanze maggiori (Clavien ≥ 3) o morte. 8 dei 12 pazienti ha conservato l'eiaculazione.

Conclusione Ra-RPLND post-chemioterapia sembra essere una procedura fattibile e oncologicamente sicura con morbidità operativa accettabile che, in condizioni favorevoli, permette il recupero dell'eiaculazione nella maggioranza dei pazienti

Lo studio ha avuto finanziamenti: No

Codice: **C51**

TREATING MILD AND MODERATE ERECTILE DYSFUNCTION WITH A COMBINED NATURAL SUPPLEMENT

N. Stanojevic¹, **A. Ruffo**², V. Vladislav Pesic³, J. Lopez⁴

¹ Sava Perovic Foundation, Belgrade, Serbia,

² Andrea Grimaldi Medical Care Group, Naples, Italy,

³ KBC Dragisa Misovic - Dedinje, Belgrade, Serbia

⁴ Well Medic CURG - Rio de la Plata 206, Del Valle, 66220 Monterrey, N.L., México

Introduction & Objectives Approximately 50% of men aged 40–70 years report suffering from some degree of erectile dysfunction (ED). PDE5-i is the first line treatment for this condition. Use of food supplements is common and more patients are seeking for alternative treatment for ED. This study investigated the efficacy of a new supplement to improve male sexual function.

Methods In this randomized, single-blind, placebo-controlled study, 72 men with mild to moderate ED were enrolled. The mean age was 54.2 \pm 15.5 years. Group A (48 pts) received the active treatment containing a mix of L-citrulline 2500 mg, Moringa oleifera 1500 mg, Tribulus terrestris 400 mg (45% saponins), Panax ginseng 400 mg, Lepidium Meyenii 200 mg, Trigonella Foenum-Graecum 200 mg, Zinc 15 mcg, Vitamin D3 7.5 mcg, Vitamin B6 1 mg. This treatment was administered twice a day for two months. Group B (24 pts) received a placebo. Patients were investigated by using the International Index of Erectile Function (IIEF-5) questionnaire, the Sexual Encounter Profile (SEP) diaries, SEP Question 2: "Were you able to insert your penis into your partner's vagina?" and SEP Question 3: "Did your erection last long enough for you to have successful intercourse?". In addition, patients underwent further evaluation with the Global Assessment Question (GAQ) by answering the two yes/no questions of the test: (GAQ-Q1) "Over the past four weeks has the treatment you have been taking improved your erectile function?" and (GAQ-Q2) "If yes, has the treatment improved your ability to engage in sexual activity over the past four weeks".

Results At one month follow-up 8 pts drop-outs (9%): consisting of 5 pts from Group A and 3 pts from Group B. 5 pts (10%) reported mild gastrointestinal symptoms. 8 pts (18.5%) reported mild insomnia. Group A showed a statistically significant improvement of the IIEF mean scores compare to the control group, from a baseline total score of 14.2 \pm 4.2 to 20.4 \pm 3.8 Vs 15.2 \pm 3.8 to 17.8 \pm 2.4. 37 pts (86%) answered 'yes' to SEP Q2 vs 26 pts (60%) pre-treatment. SEP Q3 was answered positively by 31 pts (72%) vs 25 pts (58%). For the GAQ questions, 27 pts (63%) answered "Yes" to the GAQ-Q1 while 25 pts (58%) answered "Yes" to the GAQ-Q2. When reviewing the change in SEP scores, a significant increase was noticeable between the baseline and follow-up data.

Conclusion The combination of these different supplements work in synergy to improve male sexual function.

Oral L-citrulline supplementation has proved to improve endothelium-dependent, nitric oxide (NO)-mediated vasodilation. Oral L-citrulline supplementation raises plasma L-arginine concentration and augments NO-dependentsignalling in a dose-dependent manner.

Panax ginseng is one of the finest aphrodisiacs in the world used in traditional Chinese medicine. It enhances NO and cGMP production and its release in corpus cavernosum. It enhance both acetylcholine-induced and transmural nerve stimulation-activated relaxation associated with increased tissue cGMP.

Moringa contains all the essential amino acids including threonine, tyrosine, methionine, valine, phenylalanine, isoleucine, leucine, histidine, lysine, tryptophan and many minerals like Calcium, Iron, Magnesium, Zinc, Potassium and Phosphorus. The protodioscin, a steroidal saponin contained in Tribulus terrestris has an androgen-mimetic action, binding and activating the receptor of testosterone.

So this substance is able to increase the endogenous production of testosterone, dihydrotestosterone,

a hormone luteinizing hormone (LH), dehydroepiandrosterone (DHEA) and dehydroepiandrosterone sulfate (DHEA-S) Several studies have shown that *Lepidium Meyenii* possesses many bioactivities, such as enhancing sexual function increasing fertility and improving sperm parameters. *Trigonella Foenum-Graecum* have shown androgenic and anabolic effect in male. This nutraceutical compound proved a significant efficacy in the treatment of mild/moderate ED.

Lo studio ha avuto finanziamenti: No

Codice: **C52**

IL LICHEN SCLEROATROFICO GENITALE: RISULTATI DI UNA SURVEY NAZIONALE

Stefano Lauretti¹, Michele Rizzo², Enzo Palminteri³, Marco Bitelli⁴, Lorena Di Marco², Muriel Rouffaneau⁵, Alessandro Palmieri⁶

1 Centro Chirurgico Multidisciplinare; S. Caterina della Rosa. Roma

2 Clinica Urologica, ASUGI, Università degli Studi di Trieste. Trieste

3 Chirurgia Ricostruttiva Uretrale e Genitale, Humanitas Cellini, Torino

4 Andrologia Chirurgica e Ricostruttiva, UOSD Urologia Ospedale S Sebastiano Martire Frascati. Roma

5 Presidente LISCLEA Associazione Italiana Lichen Sclero Atrofico

6 Clinica urologica, Università degli studi di Napoli Federico II. Napoli

Introduction and objectives Infertile men are at greater risk of oncologic and non-oncologic chronic disease than the fertile of comparable age.

Thereof, male factor infertility (MFI) may be considered an identifiable early sentinel marker for the development of prostate cancer (PCa). We investigated serum PSA levels in a cohort of men presenting for MFI compared to a cohort of aged-matched fertile controls, according to the EAU recommendation that a first PSA assessment should be obtained at 40-45 years of age.

Materials and methods Data from 940 (90.2%) MFI men and 102 (9.8%) fertile controls were analyzed. Groups were matched by age using propensity score weighting. Comorbidities were scored with the Charlson Comorbidity Index (CCI). According to EAU recommendations, patients were segregated as younger (group 1) and older >40 years (group 2). Serum hormones, serum PSA and semen parameters were investigated in every man. Descriptive statistics and logistic regression models tested potential associations with PSA levels.

Results Median (IQR) age, BMI and total PSA were 38 (35, 43) years, 25.0 (23.3, 26.9) kg/m² and 0.7 (0.5, 1.1) ng/mL in the whole cohort, respectively. Median PSA (0.7 vs. 0.6 ng/mL, $p=0.03$), CCI (0.8 vs. 0.1, $p=0.03$) and FSH (6.0 vs. 4.0 mIU/mL, $p<0.001$) values were higher and total testosterone (4.4 vs. 4.9 ng/mL, $p=0.003$) was lower in infertile than fertile group. Overall, a PSA value >1 ng/mL was found in 310 (29.8%) men. A higher rate of PSA >1 ng/mL was found in infertile than fertile men (30.4% vs. 19.6%, $p=0.02$). Among infertile men, sperm concentration (19.5 vs. 28.3 mil/mL, $p=0.008$) was lower in patients with PSA >1 ng/mL than those with PSA <1 ng/mL. Among fertile patients, no differences were observed according to PSA levels. Group 1 patients had lower PSA than in group 2 (0.8 vs. 1.1 ng/mL, $p=0.001$). Of all, 153 (25.5%) group 1 patients had PSA >1 ng/mL. More group 1 infertile men than fertile controls had PSA >1 ng/mL (26.9% vs. 15.8%, $p=0.03$). At MVA logistic regression analysis infertility status (OR 1.96, $p=0.04$) was the only independent predictor for serum PSA >1 ng/mL in group 1, after accounting for testosterone level and CCI.

Conclusions This case-control analysis showed that infertile men have higher PSA values than age-matched fertile controls. Of all, almost one out of three infertile men younger than 40 years have a

first total PSA value greater than 1 ng/mL.

Lo studio ha avuto finanziamenti: No

Codice: **C53**

A DOUBLE-BLIND, RANDOMIZED COMPARISON OF A COMBINATION OF VACCINIUM MACROCARPON, LYCIUM BARBARUM L. AND PROBIOTICS (BIFIPROST®) WITH SERENOA REPENS 320 MG IN THE TREATMENT OF LOWER URINARY TRACT SYMPTOMS IN MEN.

F.Chiancone¹, F.Persico¹, M.Fabiano¹, N.A.Langella¹, R.Giannella¹, L.Pucci¹, M.Carrino², P.Fedelini¹

¹ Urology Department, AORN A.Cardarelli, Naples, Italy

² Andrology Department, AORN A. Cardarelli, Naples, Italy

Introduction To compare in a randomised, non-inferiority clinical study, the efficacy and tolerability of Bifiprost® therapy vs Serenoa repens 320mg in men with lower urinary tract symptoms (LUTS).

Materials and methods From September 2018 to September 2019, 60 men over the age of 45 with an international prostate symptoms score (IPSS) ≥ 8 , a maximum urinary flow rate (Qmax) ≤ 15 mL/s, and post-void residual (PVR) < 100 mL due to benign prostatic hyperplasia (BPH) were recruited and randomized into two groups. The patients in the Group A received a daily dose of Bifiprost® for 6 months and the patients in the Group B received the same brand of Serenoa Repens extract 320mg for 6 months. All patients did not receive any other treatment for BPH. The primary outcome measure was the IPSS score, evaluated at 3 and 6 months. Secondary outcome measures included quality of life, bladder volume (Vol), maximum urinary flow rate (Qmax), average urinary flow rate (Qave) and ultrasound-estimated post-void residual urine volume (PVR). Statistical analyses were conducted using SAS version 9.3 software (SAS Institute, Inc., NC). Mean values with standard deviations (\pm SD) were computed and reported for all items. Statistical significance was achieved if p-value was ≤ 0.05 (two-sides).

Results No patients withdrew from the study. The two groups showed no significant differences ($p > 0.05$) in terms of patients' demographics and baseline characteristics [age, BMI, weight, height, comorbidity, prostate volume, voiding parameters (Vol, Qmax, Qave, PVR), IPSS score]. When comparing both therapies no significant differences were seen in IPSS score at 3 months (Group A: 9.28 ± 2.82 ; Group B: 9.03 ± 2.11 ; $p = 0.6989$) and at 6 months (Group A: 6.82 ± 2.22 ; Group B: 6.96 ± 2.42 ; $p = 0.8162$). When comparing both therapies, Group A was statistically not inferior to Group B considering the mean change in Vol, Qmax, Qave and PVR after 3 and 6 months of therapy ($p > 0.05$). No adverse events were reported in both groups.

Conclusions The treatment with Bifiprost® is not inferior to Serenoa Repens 320 mg for improving IPSS score and voiding parameters in men with LUTS after 3 and 6 months of therapy.

Lo studio ha avuto finanziamenti: No

Codice: **C54**

TERAPIA OFF-LABEL CON ACIDO IALURONICO PER IL TRATTAMENTO DELL' IPP

Daniele Tiscione, Tommaso Cai, Marco Puglisi, Andrea Scardigli, Gianni Malossini
Santa Chiara Hospital, Dept. of Urology, Trento, Italy

Introduzione Sebbene da alcuni anni sia stata approvata la terapia con collagenasi di Clostridium histolyticum per l'IPP, attualmente ancora molteplici risultano le terapie off-label utilizzate. Scopo del presente lavoro è valutare l'efficacia e la sicurezza di un trattamento orale con Zalton retard® (Acido ialuronico, Avocado e Soia) associato ad infiltrazioni peniene

con acido ialuronico 32 mg vs Zalton retard ® associato ad infiltrazioni con acido ialuronico 40 mg.

Materiali e metodi Da aprile 2017 a dicembre 2019 sono stati arruolati tutti i pazienti con diagnosi clinica di IPP in fase attiva di malattia. 81 pazienti sono stati sottoposti ad un trattamento con Zalton retard ® 1 cp ogni 48 h per 2 mesi + ciclo di infiltrazioni peniene con acido ialuronico 32 mg settimanale per 6 dosi (Gruppo A); mentre negli ultimi mesi, 27 pazienti sono stati sottoposti ad un trattamento con Zalton retard ® 1 cp ogni 48 h per 2 mesi + ciclo di infiltrazioni peniene con acido ialuronico 40 mg settimanale per 6 dosi (Gruppo B). I pazienti sono stati rivalutati dopo 3 mesi. Gli outcomes valutati sono stati: il dolore attraverso lo strumento VAS, il grado di riduzione dell'incurvamento ed il deficit erettile.

Risultati Sono stati arruolati in totale 108 pazienti. Età media: 59,7 anni. Durata della malattia: 7.58 mesi. Incurvamento medio di 33,7° nel gruppo A e 31,3° nel gruppo B. DE in 32 pazienti (39%) nel gruppo A e 11 pazienti (41%) nel gruppo B. Dopo 3 mesi abbiamo osservato un miglioramento statisticamente significativo in termini di dolore (VAS pre-6,8; VAS post-3,6; p=0,001; gruppo A - VAS pre-6,3; VAS post-3,5; p=0,001; gruppo B) e di incurvamento del pene (pre-33,7°; post 25,6°; p=0,001; gruppo A - pre-34,8°; post 25,3°; p=0,001; gruppo B) in entrambi i gruppi; senza però evidenziare una differenza statisticamente significativa tra i 2 gruppi. Nessuna differenza statisticamente significativa è stata rilevata in termini di miglioramento della funzione erettile in entrambi i gruppi. 76 pazienti (70%) hanno riferito un "ammorbidimento" della placca. Nessun effetto collaterale clinicamente significativo è stato riportato.

Conclusioni L'utilizzo di una terapia combinata a base di acido ialuronico per os ed iniettabile, rappresenta un efficace e sicuro trattamento nei pazienti affetti da IPP, in grado di migliorare notevolmente la loro qualità di vita. Un aumento del dosaggio di acido ialuronico iniettivo, non sembrerebbe associarsi ad un miglioramento dei risultati clinici.

Lo studio ha avuto finanziamenti: No

Codice: **C55**

LA QUALITÀ DI VITA DOPO IMPIANTO DI PROTESI PENIENA: RISULTATI DI 288 PAZIENTI A 1 ANNO DI FOLLOW UP. STUDIO MULTICENTRICO PROSPETTICO REGISTRO INSIST-ED

Luigi Quaresima, Lilia Utizi¹, Enrico Caraceni¹, Edoardo Pescatori², Federico Dehò³, Paolo Capogrosso³, Nicola Mondaini⁴, Alessandro Palmieri⁵, Franco Giorgio⁶, Fulvio Colombo⁷, Conti Enrico⁸, Pozza Diego³¹, Corvasce Antonio³², Antonini Gabriele⁶, Vitarelli Antonio⁹, Fiordelise Stefano¹¹, Francesco Montorsi³, Polito Massimo¹⁰, Marco Bitelli¹⁵, Silvani Mauro¹², Massimiliano Timpano¹⁹, Patrizio Vicini¹³, Francesco Boezio¹⁶, Antonio Avolio¹⁴, Matteo Paradiso¹⁷, Carlo Negro¹⁷, Alessandro Natali¹⁸, Carlo Bettocchi¹⁴, Fabrizio Palumbo¹⁴, Nicola Ghidini²⁹, Maurizio Carrino²³, Giovanni Alei⁶, Francesco Varvello²⁵, Giuseppe La Pera²², Carlo Ceruti¹⁹, Antonio Casarico³⁰, Giovanni Liguori²⁰, Antonio Barbieri²⁷, Antonino Laganà²⁸, Ludovico

Giuseppe Mario²⁶, Massimo Capone³³, Marco Falcone¹⁹, De Luca Francesco²⁴, Giovanni Grimaldi²³, Tommaso Cai²¹

- 1 Ospedale Civile Area vasta 3 Civitanova Marche
- 2 Hesperia Hospital Modena
- 3 IRRCS Ospedale San Raffaele, Milano
- 4 Ospedale Santa Maria Annunziata, Firenze
- 5 Università Federico II, Napoli
- 6 Policlinico Umberto I Roma
- 7 Policlinico S. Orsola Bologna
- 8 Ospedale San Lazzaro di Alba Roma
- 9 Policlinico II urologia universitaria Bari
- 10 Ospedali Riuniti Ancona
- 11 Poliambulatorio Baia del Re Piacenza
- 12 Ospedale degli Infermi Biella
- 13 Casa di Cura Grottaferrata Roma
- 14 Policlinico Bari
- 15 Ospedale S. Sebastiano Frascati
- 16 UOC di Cerignola Foggia
- 17 Ospedali Cardinal Massaia Asti
- 18 AUOC Firenze
- 19 Città Della Salute e Scienza Torino
- 20 Azienda Ospedaliera Trieste
- 21 Santa Chiara Hospital, Dept. of Urology, Trento, Italy
- 22 Azienda Ospedale San Camillo Forlanini Roma
- 23 Azienda Cardarelli Napoli
- 24 Alma Res – Roma
- 25 Ospedale Alba Cuneo
- 26 Acqua Viva delle Fonti Bari
- 27 Ospedale Maggiore Parma
- 28 Azienda Ospedaliera Villa Sofia Cervello Palermo
- 29 Hesperia Hospital – Modena
- 30 Casa di Cura Villa Montallegro – Genova
- 31 Clinica Villa Pia – Roma
- 32 Ospedale Andria Bari
- 33 Clinica Diaz Padova

Introduzione Si indagano i risultati e le implicazioni circa il grado di soddisfazione del paziente dopo impianto chirurgico impianto protesico attraverso il questionario validato QoLSPP (Quality of life and sexuality penile prstheses) a distanza di 1 anno.

Materiali e metodi Le analisi sono state eseguite prospetticamente in 288 pazienti, inclusi nel registro multicentrico nazionale italiano per il Trattamento della disfunzione erettile (INSIST-ED), nei quali è stata indagata la qualità di vita generale e sessuale a distanza di 1 anno dall'intervento attraverso lo strumento validato QoLSPP.

Il campione riporta un'età media di $61 \pm 9,7$ sono i pazienti che hanno assunto impianto di protesi bicomponente, 19 coloro che hanno immesso impianto di protesi idraulica e 262 coloro sottoposti a impianto di protesi tricomponente.

I punteggi sono calcolati attraverso una scala likert da 0 a 5, dove i valori da 0 a 2 registrano le risposte negative e i valori da 3 a 5 le risposte positive. I risultati nella loro frequenza e percentuale riportano il grado di soddisfazione del paziente per ciascuno dei 4 domini della QoL (Funzionale, Personale, Sociale e Relazionale) e per ogni singolo item.

Risultati Complessivamente risulta un'alta qualità di vita del paziente dopo impianto di protesi peniena, le risposte positive si attestano intorno al 90% per tutti i domini della QoL: funzionale (92,3%), relazionale (89,9%), sociale (93%), personale (92%). Il dominio sociale si evidenzia come area maggiormente positiva, con un 93,7% di risposte maggiormente positive per l'item "sentirsi come gli altri", seguito dall'item "grado di desiderio" e "soddisfazione per la durata della protesi" (93,7%) delle rispettive aree personale e funzionale. Per l'area relazionale l'item maggiormente positivo è la "soddisfazione di coppia" (93%). I pazienti che rilevano una bassa qualità di vita raggiungono una percentuale intorno all'8%, l'area maggiormente coinvolta è l'area relazionale con maggior punteggi negativi (9,7%), seguita dall'area funzionale (7,9%), personale (7,4%) e in fine sociale (6,8%). L'item maggiormente coinvolto negativamente è la frequenza dei rapporti sessuali (16,3%), rispettiva dell'area relazionale, seguito dall'item rigidità della protesi (10,76%) per l'area funzionale, e

dall'item vivacità e brillantezza (10,4%) dell'area personale.

Conclusioni Questo studio riporta un'elevata soddisfazione del paziente dopo impianto di protesi peniena per tutte le aree della QoL, in particolare quella Sociale che si caratterizza come la più resistente al cambiamento e determinante il raggiungimento di una qualità di vita generale e sessuale. L'area maggiormente negativa in cui la qualità di vita si è rilevata più bassa è l'area relazionale e a seguire l'area funzionale ad evidenziare un maggior grado di insoddisfazione.

Lo studio ha avuto finanziamenti: No

Codice: **C56**

ECOGRAFIA TESTICOLARE CON MEZZO DI CONTRASTO PER INQUADRAMENTO CLINICO DELLE PICCOLE MASSE TESTICOLARI: VANTAGGI E LIMITI (CASE REPORT)

G. Gentile, A. Franceschelli, F. Palmisano, F. Colombo

SSD Andrologia, Ospedale S. Orsola, Bologna

Introduzione La diagnosi differenziale preoperatoria delle lesioni testicolari non palpabili mediante le metodiche di Imaging è cruciale poiché consente, nei casi di negatività dei marker biochimici tumorali, un approccio chirurgico conservativo, differenziando quelle avascolari-ipovascolari (con assente-basso rischio di potenzialità maligna) da quelle ipervascolarizzate.

Materiali e metodi un paziente di 45 anni, giungeva alla nostra osservazione dopo riscontro ecografico, durante valutazione del suo quadro di oligoastenospermia, di 3 neoformazioni testicolari subcentimetriche. I markers tumorali risultavano negativi.

E' stato eseguito approfondimento diagnostico mediante ecografia con mezzo di contrasto (Contrast Enhanced Ultrasound, CEUS con Sonovue®, Bracco, 4,8 mL). Con dimostrazione di 3 lesioni nodulari ipoecogene, due, rispettivamente di 2 e 3 mm di diametro, prive di vascolarizzazione e compatibili con Leydigoma, la terza, di 7 mm di diametro presentava marcata e progressiva impregnazione contrastografica in fase precoce con wash out ritardato in fase tardiva e dunque veniva considerata di comportamento incerto. Nonostante due incontri informativi e la ripetuta proposta di intervento conservativo con esame estemporaneo intraoperatorio il paziente, richiedeva trattamento radicale previa crioconservazione degli spermatozoi.

Risultati All'esame istologico del didimo, le 2 lesioni di dimensione inferiore venivano classificate come isole di iperplasia di cellule di Leydig mentre la terza lesione, con marcata vascolarizzazione ed aspetto dubbio alla CEUS di dimostrava un tumore a cellule di Leydig, di 8 mm di diametro, privo di aspetti infitativi, con un indice proliferativo ki67 pari al 6% e basso indice mitotico. Veniva dunque confermato il rischio di overtreatment ripetutamente ribadito al paziente prima della orchifunicolectomia radicale

Conclusioni La CEUS aumenta la confidenza diagnostica nello studio della vascolarizzazione delle piccole lesioni testicolari, tuttavia ad oggi non sono presenti in letteratura chiari parametri che permettano una accurata diagnosi differenziale tra lesioni benigne e maligne ed è ancora elevato il rischio di errore diagnostico, pertanto proponiamo in caso di diagnosi di massa testicolare subcentimetrica, vascolarizzata, con markers negativi, di eseguire sempre una enucleazione della massa con esame istologico estemporaneo, come già descritto in letteratura.

Lo studio ha avuto finanziamenti: No

Codice: **C57**

EFFETTI DELL'INTERVENTO DI VARICOCELECTOMIA SUL DANNO AL DNA DEGLI SPERMATOZOI: L'ETÀ GIOCA UN RUOLO? (ECOFOODFERTILITY PROJECT)

Gentile Mariacira¹, Donnarumma Francesca¹, Esposito Giusy¹, Gentile Tommaso¹, Montano Luigi², Raimondo Salvatore¹

Introduzione e Obiettivi Con questo studio osservazionale si è cercato un nesso di causalità tra età in cui viene eseguita la chirurgia del Varicocele (CV) e l'integrità del DNA dei spermatozoi, a tale scopo abbiamo valutato la [p53] prima e dopo CV correlandolo con l'età dei partecipanti.

Materiali e Metodi Materiali: i partecipanti, a questo studio, sono 287, età compresa tra i 20 e i 34 anni, diagnosi di varicocele di 2-3 grado effettuata con EcoColorDoppler, così suddivisi: sn 69,2 %, sn+dx 29,6 %, dx 1,2 %. Le valutazioni del liquido seminale, seguendo i criteri del Manuale WHO –2010, sono eterogenee. All'epoca dell'intervento la durata della patologia varicocele variava tra i 12 e i 18 mesi. Metodi: l'eventuale danno al DNA degli spermatozoi è stato rilevato con la determinazione quantitativa della proteina p53 ottenuta mediante un'iniziale estrazione del DNA con metodica forense e una successiva determinazione con metodica immunoenzimatica-ELISA, i valori sono espressi in ng/ML di spermatozoi. La determinazione è stata fatta: prima (controllo A) e dopo (controllo B) la CV.

Risultati Dei 287 partecipanti 190 (66,2 %) hanno [p53] ritenute patologiche, $1,66 < [p53] < 13,9$ al controllo A e su questi è stato eseguito il controllo successivo all'intervento (controllo B). Eseguendo una correlazione della [p53] e successiva valutazione di t student, dei partecipanti con età compresa tra i 20 e i 27 anni (61 partecipanti), prima e dopo CV, emerge una correlazione significativa di $p < 0,001$. Successivamente viene valutata la correlazione tra partecipanti con età compresa tra i 28 e i 30 anni (78 partecipanti). in questo caso emerge una correlazione significativa di $p < 0,05$. Dei rimanenti partecipanti con età compresa tra i 31 e i 35 anni (51 partecipanti) non si evince alcuna significatività.

Conclusioni Dai dati emerge che il danno da varicocele sul DNA dei spermatozoi è quantitativamente differente tra i partecipanti allo studio, infatti si riscontra solo in 190 su 287 (66,2 %) e che 97 partecipanti (33,8 %) pur avendo un varicocele patologico non si ha alcun danno al DNA dei spermatozoi ($[p53] < 1,65$). Inoltre l'età in cui viene eseguito la CV sembra influire sulla integrità del DNA dei spermatozoi, più giovane è l'età in cui viene eseguito, migliore sarà la stabilità del DNA dei spermatozoi. Le tre fasce di età: 20-27, 28-30 e 31-35 da noi raggruppate sono frutto di valutazioni statistiche, Un più ampio studio si rende necessario per confermare questi dati.

Lo studio ha avuto finanziamenti: No

Codice: **C58**

WATERABLATION OF THE PROSTATE FOR THE TREATMENT OF LOWER URINARY TRACT SYMPTOMS IN MEN WITH BENIGN PROSTATIC HYPERPLASIA: FIRST ITALIAN MULTICENTER EXPERIENCE AFTER 1-MONTH OF FOLLOW-UP

Giorgio Ivan Russo², Ettore Di Trapani⁶, Gennaro Musi⁶, Gabriele Cozzi⁶, Ottavio De Cobelli⁶, Marco Rinaldi³, Paolo Minafra⁷, Gaetano De Rienzo⁴, Sebastiano Cimino², Paolo Verze⁵, Vincenzo Mirone⁵, Vincenzo Morgera⁵, Lorenzo Bianchi³, Gianmartin Cito¹, Marco Borghesi³, Marco Guerra³, Riccardo Schiavina³, Eugenio Brunocilla³, Matteo Salvi¹, Agostino Tuccio¹, Mauro Gacci¹, Marco Carini¹, **Andrea Cocci¹**

¹Department of Urology, Careggi Hospital, University of Florence, Florence, Italy

²Department of Urology, University of Catania, Catania, Italy

³Department of Urology, University of Bologna, Bologna, Italy

⁴Department of Urology, University of Bari, Bari, Italy

⁵Department of Urology, University of Naples, Naples, Italy

⁶European oncology institute, Milan, Italy

⁷Affidea Modena medica, Modena, Italy

Introduction and objectives Transurethral resection of the prostate (TURP) is considered the gold standard for minimally invasive treatment of lower urinary tract symptoms due to benign prostate enlargement of <80ml. However, new technologies are facing and waterablation is gaining new interest in treating lower urinary tract symptoms (LUTS) secondary to benign prostatic hyperplasia (BPH). The Aquabeam system uses high-velocity water jets to robotically ablate prostatic tissue under real-time ultrasound guidance, with hemostasis achieved via a catheter balloon tamponade and a novel traction device or electrocautery.

Materials and methods Waterablation was performed in 36 patients with symptomatic BPH in a multicenter prospective study. Baseline, peri-operative and 1-month urinary function data were collected, including uroflowmetry, international prostate symptom score (IPSS), IPSS-Quality of life (IPSS-QoL) and post void residual (PVR).

Results Mean age was 67.5 (SD 1.83), baseline mean IPSS was 20.4 (SD 1.15), baseline mean peak flow was 9.05 (SD 0.65) and mean prostate volume was 85.9 cc (SD 6.08). After 1 month of surgery, mean change of peak flow was +7.94 ml/s (SD 1.51)($p < 0.01$), of IPSS was -10.2 (SD 2.06)($p < 0.01$), of PVR -80.2 cc (SD 26.26) ($p < 0.01$) and IPSS-QoL was -2 (SD 4.11)($p < 0.01$). Median of catheterization (days) was 3.0 (SD 3.1) and median of hematuria 1.0 (SD 1.33) while the rate of post-operative antegrade ejaculation was 80.0% (30/6).

Conclusions We showed the first Italian multicenter experience for Waterablation to treat LUTS/BPH. Although the low number of treated patients and the low learning curve among center, the procedure was demonstrated to be safe and effective. Interesting, the rate of antegrade ejaculation is higher than other procedures reported in literature.

Lo studio ha avuto finanziamenti: No

Codice: **C59**

CHALLENGING THE USE OF COLOR DOPPLER DUPLEX ULTRASOUND IN THE PRESENT ERA – FINDINGS FROM TWO DIFFERENT SCENARIOS IN THE EVERYDAY CLINICAL PRACTICE

Walter Cazzaniga¹, Paolo Capogrosso¹, Davide Oreggia¹, Nicolò Schifano¹, Luca Boeri^{1,3}, Edoardo Pozzi¹, Luigi Candela¹, Eugenio Ventimiglia¹, Federico Belladelli^{1,2}, Giuseppe Fallara¹, Andrea Baudo^{1,2}, Costantino Abbate¹, Francesco Montorsi^{1,2}, Andrea Salonia^{1,2}

¹Division of Experimental Oncology/Unit of Urology; URI; IRCCS Ospedale San Raffaele, Milan, Italy

²University Vita-Salute San Raffaele, Milan, Italy

³Department of Urology, Foundation IRCCS Ca' Granda – Ospedale Maggiore Policlinico, University of Milan, Milan, Italy

Introduction and Objectives - We sought to evaluate the prevalence of Color Doppler Duplex Ultrasound (CDDU) parameters suggestive for arteriogenic erectile dysfunction (ED) in a cohort of men without known cardiovascular risk factors (CVD); and to depict CDDU findings at different ages.

Materials and Methods - 125 consecutive patients evaluated at a single academic outpatient clinic were analysed. All patients underwent dynamic CDDU. Arterial deficiency was diagnosed for PSV < 25 cm/sec and venogenic deficiency for RI < 0.85. Comorbidities were scored with the Charlson Comorbidity Index (CCI). According to comorbid CVD risk factors, patients were segregated in two groups (CVD- vs. CVD+); descriptive statistics was applied to evaluate the prevalence of CDDU parameters suggestive for arteriogenic ED in CVD- individuals. Descriptive statistics and multivariable logistic regression analysis with local polynomial smoothing method was used to calculate the probability of pathological findings at different ages.

Results - Of 125 patients, 56 (44%) were CVD- and 74 (56%) CVD+. Patients CVD- were younger (median (IQR) 44.0 (36.0 – 56.2) vs. 51.0 (43 – 60); $p = 0.05$) and had a lower BMI (24.9 (22.8-26.7) vs. 26.1 (24.4 – 29.3); $p = 0.003$). In the CVD+ group, most common risk factors were hypertension (49.3%), cigarette smoking (46.4%) and diabetes mellitus (10.3%). Overall, 51.7% vs. 56.6% CDDU were suggestive for any vascular dysfunction in CVD- vs. CVD+ patients. Of CVD-, 7.1% patients showed an arteriogenic ED vs. 12.6% in the CVD+ group ($p=0.8$). As for age classification, 35 (28%) patients were < 40 years, 65 (52%) were between 40 and 60 years, and 25 (20%) men were > 60 years at the time of CDDU assessment. The prevalence of pathological CDDU parameters increased throughout ageing (34.3% vs. 61.5% vs. 64.2%), with an increased prevalence of both arteriogenic and venogenic dysfunction (5.7% vs. 12.3% vs. 8% and 28.6% vs. 49.2% vs. 56.0%), respectively. At MVA, the probability of having normal CDDU parameters ranged between from 76% <40 years of age to 28% at 75 years of age.

Conclusions - Despite the absence of any CVD, a non-negligible proportion of men with ED suffers from an arteriogenic dysfunction. Moreover, a significant proportion of patients in our cohort had pathological findings at CDDU at 75 years of age. These findings may be helpful to further improve the selection of the appropriate candidates for dynamic CDDU during the ED diagnostic work-up.

Lo studio ha avuto finanziamenti: No

Codice: **C60**

UTILIZZO DEL LINFONODO SENTINELLA IN PAZIENTE DI 26 ANNI AFFETTO DA CARCINOMA SCUMOSO DEL PENE ASSOCIATO AD INFEZIONE HPV 16

A. Izzo¹, G. Quarto¹, L. Castaldo¹, G. Grimaldi¹, R. Muscariello¹, D. Franzese², S. Rossetti³, S. Perdonà¹.

¹ U.O.C Di urologia Istituto Nazionale Tumori Fondazione G. Pascale-IRCCS, Naples, Italy.

² Urologic Section, Department of Neurosciences, Sciences of Reproduction, and Odontostomatology, University of Naples Federico II, Naples, Italy.

³ Departmental Unit of Experimental Uro-Andrologic Clinical Oncology, Istituto Nazionale Tumori Fondazione G. Pascale-IRCCS, Naples, Italy.

Introduzione l'obiettivo di questo lavoro è riportare il ruolo della valutazione intraoperatoria mediante utilizzo di gamma ray detection probe del linfonodo "sentinella" nel trattamento conservativo in un paziente di 26 anni affetto da carcinoma squamoso del pene HPV 16 correlato.

Materiali e metodi Riportiamo il raro caso di un uomo di 26 anni sottoposto a biopsia escissionale del glande risultato essere affetto da carcinoma squamoso in situ del pene correlato ad infezione HPV 16 ed associato a focale interruzione della lamina basale.

Il paziente è stato successivamente valutato dal Gruppo Oncologico Multidisciplinare (GOM) dell'Istituto Nazionale dei tumori di Napoli e gli è stato indicato l'intervento chirurgico di glandulectomia parziale e sua ricostruzione, valutazione intraoperatoria dei margini chirurgici e del linfonodo sentinella previa linfoscintigrafia mediante infiltrazione perilesionale di ^{99m}Tc.

Risultati i margini chirurgici e il linfonodo sentinella rinvenuto mediante l'utilizzo della gamma probe sono risultati negativi. La dimissione del paziente è avvenuta in prima giornata. Per la medicazione è stata utilizzata una matrice cicatrizzante per 30 giorni. Il risultato estetico e funzionale a distanza di 30 giorni è risultato pienamente soddisfacente da parte del paziente, sia in termini di sensibilità che in termini di qualità dell'erezione (IIEF-5). Il paziente è tutt'oggi in follow up oncologico libero da malattia.

Conclusioni L'utilizzo del linfonodo sentinella può essere indicato in tutti i pazienti affetti da carcinoma squamoso del pene, in particolare in quelli già sottoposti a chirurgia incisionale a fini diagnostici a causa della favorita diffusione linfatica conseguente all'intervento chirurgico. In particolare è risultato di grande aiuto nel caso descritto data la giovane età del paziente e il trattamento conservativo.

Lo studio ha avuto finanziamenti: No

Codice: **C61**

FOLLMANN'S SYPHILITIC BALANITIS: A CASE REPORT.

Giacomo Rebez, Andrea Boltar, Carlo Trombetta, **Andrea Piasentin**

Clinica Urologica Università di Trieste

A healthy 28 year old man went to the generic doctor showing little painless erosion of glans and erithema which was initially treated with topic products based on antibiotics and cortisone (gentalin beta). The treatment seemed to be ineffective and after two weeks patients was routed by generic doctor to urological office visit. Urologic-andrologic physical examination revealed painless crust erosion of the glans and foreskin associated with edema (Figure

1b). Further evaluation also revealed an ulceration on the coronal sulcus.

He also manifested significant bilateral inguinal lymphadenopathy.

The rest of the physical examination showed no abnormalities. He reported the last high-risk sexual intercourse with a man about two months earlier and therefore was routed to the STD centre in Trieste.

Dermoscopy revealed the presence of homogeneously distributed glomerular vessels and focused linear curved vessels on an erythematous background with hyperpigmented post-inflammatory areas (Figure 1a)). Polymerase chain reaction (PCR) test turned positive for *Mycoplasma genitalium*.

The serological tests for HIV and Hepatitis B and C were negative but syphilis were positive with a titre of VDRL 1:32, TPHA 1:1280. Based on the clinic evaluation and haematochemical blood tests, the diagnosis of Follmann's syphilitic balanitis (SBF) was performed and treated with Doxycycline 100 mg twice daily for 14 days was started. For *Mycoplasma genitalium* co-infection, treatment with Azithromycin 500 mg one day and 250 mg per next four days was done.

The etiopathogenesis of SBF is not yet clarified to date, but it seems to be linked to a conspicuous intraepidermal accumulation of TP due to active infiltration of the spirochaetes through the capillary walls and the epidermal basal membrane with subsequent conspicuous inflammation of the glans Clinical suspect of SBF as well as confirmation by positive PCR for TP on ulcer and positive serological tests with non-treponemal and treponemal tests is necessary.

Lo studio ha avuto finanziamenti: No

Codice: **C62**

COMPLICATIONS AFTER WATERABLATION OF THE PROSTATE FOR THE TREATMENT OF LOWER URINARY TRACT SYMPTOMS IN MEN WITH BENIGN PROSTATIC HYPERPLASIA

Andrea Cocci¹, Marco Salvi¹, Ettore Di Trapani⁴, Gennaro Musi⁴, Gabriele Cozzi⁴, Ottavio De Cobelli⁴, Marco Rinaldi², Paolo Minafra⁸, Gaetano Di Rienzo⁵, Sebastiano Cimino³, Paolo Verze⁷, Vincenzo Mirone⁷, Vincenzo Morgera⁷, Giovanni Cacciamani⁸, Lorenzo Bianchi², Gianmartin Cito¹, Marco Borghesi², Marco Guerra², Riccardo Schiavina², Eugenio Brunocilla², Agostino Tuccio¹, Mauro Gacci¹, Marco Carini¹, Giorgio Ivan Russo³

1 Department of Urology, Careggi Hospital, University of Florence, Florence, Italy

2 Department of Urology, University of Bologna, Bologna, Italy

3 Department of Urology, University of Catania, Catania, Italy

4 European institute of oncology, Milan, Italy

5 Department of Urology, University of Bari, Bari, Italy

6 Department of Urology, Catherine and Joseph Aresty, Los Angeles, United States

7 Department of Urology, University of Naples, Naples, Italy

8 Affidea Modena Medica, Modena, Modena, Italy

Introduction and objectives Transurethral resection of the prostate (TURP) is considered the gold standard for minimally invasive treatment of lower urinary tract symptoms due to benign prostate enlargement of <80ml. However, new technologies are facing and waterablation is gaining new interest in treating lower urinary tract symptoms (LUTS) secondary to benign prostatic hyperplasia (BPH). The Aquabeam system uses high-velocity water jets to robotically ablate prostatic tissue under real-time ultrasound guidance, with hemostasis achieved via a catheter balloon tamponade and a novel traction device or electrocautery. The present abstract is focus on the complications of this technique.

Materials and methods Waterablation was performed in 36 patients with symptomatic BPH in a multicenter prospective study. Baseline, peri-operative and 1-month urinary function data were collected, including uroflowmetry, international prostate symptom score (IPSS), IPSS-Quality of life (IPSS-QoL) and post void residual (PVR). The primary end point was evaluated as complication rates graded by Clavien-Dindo score (CDS).

Results Mean age was 67.5 (SD 1.83), baseline mean IPSS was 20.4 (SD 1.15), baseline mean peak flow was 9.05 (SD 0.65) and mean prostate volume was 85.9 cc (SD 6.08). Complications in 1-day post-operative were none in 25 subjects (67.74%), grade 1 in 5 (16.13%), grade 2 in 5 (12.90%) and grade 3 in 1 patient (3.23%). In particular, we found haematuria in 6 patients (16.67%) and fever in 3 (8.33%) and one urosepsis (2.78%). At

the removal of catheter, we found 1 case of stress urinary incontinence (2.78%) and 3 had acute retention of urine (8.33%). We observed only 1 case of re-intervention (2.78%). At 1 month, we found 5 cases of dysuria (19.23%) and 5 cases of medical therapy prescription (19.23%) (4 cases of alpha-blocker and 1 of duloxetine)

Conclusions The present study is the first multicenter experience for Waterablation to treat LUTS/BPH. The most common complications are haematuria (16.67%) and fever (8.33%). The present study could be an important starting point for the best selection of the patients on this new technique.

Lo studio ha avuto finanziamenti: No

Codice: **C63**

RISOLUZIONE CHIRURGICA DI UN VOLUMINOSO EMANGIOMA SCROTALE IN UN GIOVANE ADULTO

Massimo Iafrate, Nicolò Leone, Filiberto Zattoni

Clinica Urologica, Università di Padova

Introduzione Gli emangiomi sono le neoplasie vascolari più comuni nei bambini con un'incidenza nel primo anno di età che varia dal 3 al 10%. Gli emangiomi dello scroto sono condizioni rare e ad oggi sono stati pubblicati meno di 50 casi. A livello genitale possono essere localizzati nel glande, nell'asta del pene e nello scroto. In genere, sono masse indolori ma a volte possono essere associate a sintomi.

Materiali e Metodi Un paziente maschio di 24 anni è giunto alla nostra attenzione per un sospetto emangioma scrotale noto dall'età di 14 anni in progressiva crescita negli ultimi 12 mesi. Nei 36 mesi precedenti, si è recato al pronto soccorso tre volte per episodi di algie scrotali sostenute da trombosi dell'emangioma che è stata trattata in modo conservativo. L'esame obiettivo mostrava una massa vascolare morbida di circa 3x7 cm posizionata nella parte centrale dello scroto. I testicoli con il loro funicolo erano completamente indipendenti dalla massa vascolare. La risonanza magnetica dello scroto ha documentato la presenza di una lesione di 6x7x7 cm costituita da strutture venose dilatate che si sviluppavano nel contesto della parete interna dello scroto destro compatibile con la diagnosi di emangioma. La lesione si presentava a stretto contatto con il corpo cavernoso destro ma senza segni di infiltrazione della fascia di Buck. L'escissione chirurgica è stata quindi pianificata. In anestesia generale, è stata praticata un'incisione a forma di losanga nella cute scrotale. Attraverso un'accurata dissezione è stato identificato l'emangioma all'interno dello scroto. Dopo un attento isolamento della neoplasia dalle strutture funicolari e dai testicoli, il sito d'origine a livello perineale sulla fascia di Buck è stato identificato, legato e sezionato con successiva completa rimozione dell'emangioma che è stato inviato per esame istologico. Il decorso postoperatorio è stato regolare. L'esame istopatologico ha documentato un emangioma scrotale. Ad 1 anno di follow-up non vi sono recidive ed il risultato estetico è soddisfacente.

Conclusioni L'emangioma cavernoso dello scroto è un'entità rara la cui procedura diagnostico-terapeutica non è ancora stata completamente definita. Ad oggi sono state segnalate diverse opzioni di trattamento, il più nei pazienti pediatrici. L'escissione chirurgica è una scelta terapeutica con risultati sicuri e soddisfacenti, soprattutto per le lesioni di grandi dimensioni in età adulta.

Lo studio ha avuto finanziamenti: No

Codice: **C64 - ASSENTE**

Codice: **C65 - ASSENTE**

Codice: **C66**

INCIDENZA DEL LICHEN GENITALE MASCHILE, DIMINUZIONE DEL TEMPO DI INSORGENZA NELLE NUOVE GENERAZIONI?

Giuseppe Chiacchio, Massimo Polito, Carmine Franzese, Lucia Pitoni, Andrea B. Galosi

U.O.C. Clinica urologica - Ospedali riuniti Ancona – Torrette

Introduzione e obiettivi La balanite xerotica obliterante (BXO) è una malattia infiammatoria cronica, considerata variante maschile del lichen sclerosus. Tra i segni e sintomi rientrano la presenza di chiazze bianche lucide, associate ad escoriazioni, microlesioni, prurito, dolore. Inoltre con l'evolversi del quadro essa può causare uretrite, stenosi uretrale, fimosi serrata e difficoltà allo scorrimento dei foglietti balano-prepuziali. Da ciò evince la richiesta di visita andrologica dei soggetti. L'approccio terapeutico si basa sull'utilizzo di numerosi tipi di prodotti topici nei casi di lieve-media entità, mentre un approccio chirurgico è necessario nei casi più gravi o non responders. L'incidenza della BXO in letteratura è eterogenea, in particolare nei soggetti con una diagnosi di fimosi, condizione che sembra essere più comune tra i 30-60 anni. Scopo del nostro studio è stato quello di valutare la percentuale di riscontro della BXO all'esame istopatologico eseguito sul prepuzio di pazienti sottoposti a circoncisione per fimosi, evidenziando come negli ultimi anni ci sia una riduzione del tempo di insorgenza di tale malattia.

Materiali e Metodi uno studio retrospettivo di 1 anno preso come campione (gen.2019-gen.2020), basato su un singolo centro, è stato condotto su pazienti sottoposti a circoncisione per fimosi. In particolare si è andato a cercare la presenza o meno di BXO all'esame istopatologico condotto sui prepuzi asportati chirurgicamente. L'analisi statistica è stata condotta usando Excel.

Risultati Abbiamo analizzato 33 pazienti operati di circoncisione dopo diagnosi di fimosi, sintomatici per disuria o perdita di funzionalità, intesa come la perdita della normale capacità di scorrimento tra i foglietti balano-prepuziali. Veniva inoltre eseguito screening per eventuali infezioni genito-urinarie concomitanti. Sono stati invece esclusi dallo studio quei pazienti che volevano sottoporsi a circoncisione per motivi estetici o religiosi. Nei 33 campioni istopatologici analizzati la BXO era presente in 22 (66%). Si è deciso inoltre di dividere il nostro campione in 2 gruppi distinti in base all'età dei pazienti al momento della diagnosi (maggiore di 31anni: gruppo 2 o minore di 31 anni:gruppo 1) e si è proceduto ad analizzare la percentuale di BXO in ogni gruppo. Il gruppo 1 era formato da 13 pazienti e in 5 di questi si è trovato riscontro istopatologico di BXO (38 %); mentre il gruppo 2, formato da 20 pazienti, ha avuto un riscontro istopatologico di BXO in 17 pazienti (85%).

Conclusioni L'incidenza della BXO nei 33 pazienti andati incontro a circoncisione per fimosi è in linea con quella di altri studi presenti in letteratura. Mentre appare in aumento l'incidenza di BXO in pazienti giovani (< 31 anni), ciò potrebbe

indicare una riduzione negli ultimi anni del tempo di insorgenza della BXO il che implica maggior attenzione e prevenzione nelle giovani generazioni maschili

Lo studio ha avuto finanziamenti: No

Codice: **C67**

ESPRESSIONE DELLA GLUTATIONE TRANSFERASI ERITROCITARIA (E-GST) E DELL'ALBUMINA OSSIDATA (HSAOX) NEL LICHEN SCLERO ATROFICO GENITALE MASCHILE

Lauretti Stefano¹, Giorgio Ricci², Enzo Palminteri³, Angelo Augenti¹

1 Chirurgia Andrologica, Chirurgia Plastica e Medicina Rigenerativa, Casa della Salute S. Caterina della Rosa

2 Dipartimento di Scienze e Tecnologie Chimiche. Facoltà di Biochimica, Università degli Studi di Roma Tor Vergata

3 Chirurgia Ricostruttiva Uretrale e Genitale, Humanitas Cellini, Torino

Introduzione e obiettivi Il lichen scleroatrofico (LSA) è la manifestazione dermatologica di un processo infiammatorio cronico ad eziologia ancora sconosciuta che colpisce prevalentemente l'area ano-genitale in entrambi i sessi. Il danno ossidativo del DNA, i livelli aumentati di citochine Th-1 specifiche e la comparsa di anticorpi contro le proteine della matrice extracellulare sono alcune delle alterazioni che sembrano confermare una forma di reazione autoimmunitaria verso agenti tossici endogeni ed esogeni. La difesa contro tali attacchi è il ruolo degli enzimi glutazione transferasi (GST). Nell'uomo una GST specifica eritrocitaria (e-GST) evidenzia in particolare l'esposizione cronica a tossine e fattori ossidanti. Per tale caratteristica, l'e-GST è sovraespressa nei pazienti con aumento cronico elevato di tossine circolanti, come nei dializzati, configurandosi in tal modo come un biomarcatore naturale del grado tossicità ematica e della conseguente risposta di difesa dell'organismo in patologie croniche come il LSA.

Materiali e metodi Dal novembre 2019 al gennaio 2020, in 25 maschi sottoposti a circoncisione sono state dosate l'e-GST e l'albumina sierica. Quest'ultima, con l'aumento dello stress ossidativo, può andare incontro ad una ossidazione irreversibile (HSAox) e alla diminuzione della sua funzione antiossidante, oltre al danno della sua capacità di legame e trasporto. I risultati sono stati confrontati con le condizioni cliniche e l'istologia definitiva.

Risultati I valori medi di e-GST nei pazienti con conferma istologica di lichen scleroatrofico sono risultati significativamente più alti ($7,2 \pm 2,4$ U / g Hb) rispetto ai soggetti sani ($5,8 \pm 1,8$ U / g Hb). Un valore molto vicino a quello medio è determinato solo in sette fasi acute della malattia ($7,0 \pm 2,1$ U / g Hb). Il secondo importante biomarcatore a breve termine dello stress ossidativo in varie condizioni patologiche, ovvero l'HSAox è stata analizzata in 17/25 pazienti. Il valore medio ($42 \pm 9\%$) è simile a quello riscontrato nei soggetti normali ($40 \pm 5\%$); tuttavia, solo in quattro pazienti in fase acuta il valore medio aumenta in modo evidente ($49 \pm 3\%$).

Conclusioni Il dosaggio dell'e-GST si conferma valori elevati nei pazienti con quadro clinico-patologico di LSA conclamato rispetto ai controlli, mentre quello dell'HSAox è più alto solo in un piccolo sottogruppo di pazienti esaminati anche se questi presentavano tutti un quadro clinico localmente più avanzato.

Lo studio ha avuto finanziamenti: No

Codice: **C68**

IPP TRATTAMENTO COMBINATO

Giuseppe Dachille¹, **Francesco Di Modugno**¹, Enrico Lavelli¹, Alfonso Lorusso¹, Massimo Danti², Pasquale Ditunno¹

1 Urologia Universitaria Il policlinico di Bari

2 Studio medico Trastevere Roma

Introduzione Scopo di questo lavoro è valutare l'approccio combinato della terapia medica onde d'urto a bassa intensità, elettroporazione e vacuum device nel trattamento dell'induratio penis in fase stabile

Materiali e metodi Abbiamo considerato nella nostra esperienza clinica 65 pz trattati tra 35 a 67 anni (media 55) con elettroporazione e ciclo di onde d'urto consensuale e successiva terapia con vacuum device. Tutti i pazienti avevano

una malattia stabilizzata da circa 3 mesi. Le sedute sono state 12 della durata di 15 minuti ciascuna nella quale veniva praticata onda d'urto ed elettroporazione per circa 6 mesi e terapia con vacuum device 3 volte alla settimana per 6 mesi. Mediante la tecnica dell'elettroporazione è stato veicolato verapamil e desametasone sulla placca. Tutti i pazienti presentavano un incurvamento non superiore ai 50 gradi, (range 30-50), in 18 di essi si associava un deficit erettile moderato valutato con IIEF

Risultati In tutti i pazienti trattati è scomparso il dolore dopo circa 10 sedute. In 47 (72%) pazienti abbiamo avuto un miglioramento medio del grado di curvatura di circa 15 gradi (range 30-50) con prova goniometrica e miglioramento del deficit erettile in 10 pz dei 18 che presentavano DE (deficit erettile). Nessun effetto collaterale è stato riportato.

Conclusioni A nostro avviso il trattamento combinato, ESWT, elettroporazione, e Vacuum device per l'IPP rappresenta una alternativa valida nel trattamento dell'IPP nelle forme di incurvamento non superiore ai 50 gradi permettendo un miglioramento medio del grado di incurvamento e del deficit erettile

Lo studio ha avuto finanziamenti: No

Codice: **C69**

LA GRIFFONIA NELLA CURA DELLA EIACULAZIONE PRECOCE. AGGIORNAMENTO DEI RISULTATI

Andrea Militello¹, Simona Di Francesco^{1,2}, Stefano Brunori³

¹ Dipartimento di Scienze Urologiche, Biomediche e Traslazionali. Università Federiciana, Cosenza.

¹⁻² Dipartimento di Scienze Mediche, Orali e Biotecnologiche. Università degli Studi G.D'Annunzio di Chieti-Pescara.

³ Nuova Clinica Annunziata - Roma

Introduzione Il riflesso eiaculatorio è la risposta ad un'interazione complessa di stimoli nel cervello e nel sistema nervoso centrale in cui la serotonina riveste un ruolo chiave.

Questo neurotrasmettitore è in grado di controllare il riflesso eiaculatorio e la risposta sessuale maschile: un aumento dei livelli di serotonina a livello del sistema nervoso centrale svolge un'azione inibitoria sull'eiaculazione, ritardandone la comparsa. Quindi l'eiaculazione precoce può essere associata ad una ridotta concentrazione di serotonina.

Le soluzioni terapeutiche per aumentare i livelli di serotonina possono essere sia di tipo farmacologico che naturale.

Materiali e metodi

Nella nostra esperienza professionale, una volta esclusa la presenza di cause di tipo organico, abbiamo modo di sperimentare l'efficacia della Griffonia sui sintomi dell'eiaculazione precoce. Questa pianta è ricca di 5-HTP (5-idrossitriptofano), aminoacido naturale precursore appunto della serotonina; l'assenza di effetti collaterali ne permette un uso sicuro e, quando serve, prolungato. Nel periodo 2012 ottobre 2019, sono stati esaminati 545 pazienti affetti da eiaculazione precoce.

In questo gruppo abbiamo selezionato 220 pazienti in cui sono state escluse cause organiche locali.

In alternativa alla terapia medica classica è stata offerta ai pazienti l'opportunità di assumere per tre mesi consecutivi un integratore di Griffonia, Valeriana e Passiflora.

Alla linea di base e dopo tre mesi di trattamento, a ciascun paziente è stato chiesto di completare i seguenti questionari: International Index of Erectile Function (IIEF-5), Eiaculazione precoce Strumento diagnostico (PEDT), Male Sexual Health Questionnaire (MSHQ).

Risultati

è stato trovato un significativo miglioramento statistico in termini di controllo della eiaculazione precoce al basale e la visita di follow-up (rispettivamente IIEF-5: 8.7 vs 14.01; $p < 0.001$). Inoltre, alla visita di controllo, 70/220 uomini (33 %) hanno riferito un miglioramento soggettivo della qualità dell'erezione e un migliore controllo dell'eiaculazione (PRO).

In conclusione, il nostro studio, anche se supportato da risultati preliminari, ha dimostrato come la Griffonia integrata con Passiflora e Valeriana siano in grado di migliorare parzialmente il controllo dell'eiaculazione in pazienti affetti da EP, primari o secondari all'ED senza effetti avversi significativi.

Lo studio ha avuto finanziamenti: No

Codice: **C70**

THE COST-EFFECTIVENESS OF ANDROSEXUOLOGICAL APPROACH: DESIGN OF THE STUDY

E. Baldassarre¹, M. Milan², N. Savoye³, G. Alarcon⁴, M. Madeo², I. Vittoria¹, I. Prosperi Porta¹, S. Benvenuti¹

¹ SC Urologia, ASL Valle d'Aosta

² SSD Psicologia, ASL Valle d'Aosta

³ Psicoterapeuta Cognitivo Comportamentale Libero Professionista

⁴ AIED, SC Urologia, Università degli Studi di Trieste

Introduction The aim of this study is to investigate the importance of a combined androsexuological evaluation in some fields of andrology. We defined of a brief survey providing scores useful for identification and quantification of the outcome after sexuological evaluation in andrological patients. This score will be correlated with a previous andrological and sexuological score. We believe that the sistematical presence of a sexuologist could be important in terms of cost-effectiveness and may represent an interesting model and consolidate this clinical approach for the next future in different european Health Systems.

Material and methods In Aosta we started a project of cooperation between andrologist and psychologists in 3 defined cohorts of patients: moderate-severe Erectile Dysfunction (IIEF5 range 1-11), Praecox Ejaculation (PEDT test > 11), Induration Poenis Plastica (PDQ test).

We planned two arms: in the first

one all patients were submitted to andrological evaluation: medical visits, laboratory and radiological investigations, on a period of 6-months, evaluating the costs derived from supplements intake or drug consumption and the diagnostic procedures. In the 2nd arm, the patients, randomized for age and gravity of illness respect the first arm (t-student), were approached both by andrologist and sexuologist. All patients will receive a questionnaire at each andrological and sexuological evaluation, relative to the specific pathology, and a structured survey after the last sexuological evaluation. At 6-months we will evaluate the costs such as in the first group.

The analysis of QoL and outcome will come out from a global evaluation of the scores derived from tests and survey.

Results This study presents two fundamental endpoints: to demonstrate the quantitative advantages in terms of cost-effectiveness of the andro/sex approach and to validate the systematical presence of sexuologist in terms of amelioration of QoL in these cohorts. Nowaday we enrolled 15 patient s: 10 ED, 3 IPP, 2 PE. We planned to enroll about 100 pts.

Conclusions We believe that this structured andro/sexuological approach may represent a new modality in andrological diseases management, helpful especially in our Public Health Systems, in terms of reduction of costs, like PDE5i intake and radiological investigations. This study represents only a first step in this direction and aims to create a new topic in clinical research.

Lo studio ha avuto finanziamenti: No

Codice: **C71**

POST ORGASMIC ILLNESS SYNDROME

Daniele Tiscione, Tommaso Cai, Marco Puglisi, Andrea Scardigli, Gianni Malossini

Santa Chiara Hospital, Dept. of Urology, Trento, Italy

Introduzione POIS (Post Orgasmic Illness Syndrome) rappresenta una rara forma di disfunzione peri-orgasmica, caratterizzata da un vasto corteo sintomatologico che si manifesta dopo l'eiaculazione. Descritta per la prima volta nel 2002 da Waldinger, fino ad oggi sono stati riportati circa 60 casi in letteratura. L'eziopatogenesi è ancora sconosciuta e diverse teorie sono state proposte, attualmente la POIS sembrerebbe essere riconducibile ad un disordine autoimmune

e/o allergico.

Materiali e metodi Maschio, di 23 anni, giungeva alla nostra attenzione riferendo numerosi sintomi che comparivano dopo l'eiaculazione. Si procedeva quindi ad accurata anamnesi, esame obiettivo e nel sospetto di POIS si valutavano i 5 preliminari criteri di diagnosi proposti da Waldinger. Si escludevano quindi altre possibili cause della sintomatologia.

Risultati Il ragazzo presentava tutti e 5 i preliminari criteri diagnostici di POIS, in particolare il paziente riferiva: mal di testa, sintomi influenzali, sudorazione, malessere ed affaticamento fisico-mentale-cognitivo, pallore, congestione nasale, comparsa di brufoli.

I sintomi sono comparsi fin da sempre, solitamente dopo alcune ore dall'eiaculazione per poi protrarsi fino anche ad una settimana e per poi risolversi autonomamente. Il paziente riferiva di non aver mai assunto una terapia specifica per tale sintomatologia, di essere single e di non aver mai avuto rapporti sessuali.

Conclusioni La POIS rappresenta una rara, ma invalidante sindrome, in grado di impattare in modo molto negativo la qualità di vita del paziente. Sebbene si ipotizzi una patogenesi autoimmune o allergica, molto spesso le terapie specifiche per tali disordini risultano inefficaci. Utile invece, potrebbe essere una terapia a base di FANS, da assumere prima e dopo l'eiaculazione.

Lo studio ha avuto finanziamenti: No

Codice: **C72**

RECUPERO TESTICOLARE IN PAZIENTI AFFETTI DA SINDROME DI KLINEFELTER

Andrea Ortensi¹, Ilaria Ortensi², Menelao Kharpatiotakis¹, **Manuela Andreozzi**³, Clara Ciampi³

1 Centro di Microchirurgia Ricostruttiva Casa di Cura Ars Biomedica - Roma

2 Responsabile Laboratorio di Seminologia Altamedica - Roma

3 Laboratorio Seminologia Altamedica – Roma

Introduzione ed obiettivi La procedura di recupero microchirurgico di spermatozoi testicolari o “Micro-Tese” (Microdissection Testicular Sperm Extraction) è di supporto alle tecniche di Procreazione Medicalmente Assistita (PMA), poiché grazie all'uso di mezzi ottico di ingrandimento, è considerata la tecnica d'elezione, con il più alto tasso di successo nel trattamento dell' Azoospermia secretiva (NOA). Quest'ultima può essere causata da diversi fattori, tra i quali alterazioni cromosomiche, come la Sindrome di Klinefelter (47XXY)(KS).

Lo scopo di questo lavoro è di evidenziare l'importanza del Micro-Tese mettendo a confronto due fratelli gemelli affetti da KS.

Materiali e metodi Tecnica microchirurgica Micro-Tese, analisi biologica estemporanea, crioconservazione tessuto testicolare, istopatologia.

Risultati I pazienti presentavano i seguenti parametri diagnostici:

paziente 1: cariotipo 47XXY, FSH: 22,2 mU/ml, Testosterone: 2,4 ng/ml, test. dx: 2,7X1,5X1 cm; test. sx: 2,8X1,6X1,1 cm, esame seminale (V: 3,6 ml, pH:7.3, azoospermia).

Paziente 2: cariotipo 47XXY, FSH: 31,6 mU/ml, Testosterone: 2,7 ng/ml, test. dx: 26X11 mm; test. sx: 27X12 mm, esame seminale (V: 2,5 ml, pH: 7.4, azoospermia).

Entrambi gli interventi sono stati affiancati da consulenza biologica in sala operatoria per l'analisi estemporanea dei tubuli seminiferi, che ha dato come esito:

paziente 1: nella gonade dx si è evidenziata la presenza di rarissimi nemaspermi immobili; dopo colorazione May-Grunwald Giemsa si repertano alcuni spermatidi. Nella gonade sinistra non sono stati repertati spermatozoi maturi; dopo colorazione May-Grunwald Giemsa si repertano rari spermatidi. Si è proceduto a crioconservare n°3 vaials presso la Banca del Seme.

paziente 2: assenza di nemaspermi in entrambe le gonadi, con presenza di spermatidi (a sx) e spermatogoni (a dx).

Conclusioni Dal confronto di due pazienti fratelli gemelli entrambi affetti da KS, si evince come la tecnica di recupero di nemaspermi dal testicolo (Micro-Tese), aumenti sensibilmente l'individuazione di loci di spermatogenesi completa e il successivo recupero delle cellule nemaspermiche. Per entrambi i pazienti l'esame istologico ha supportato l'esito

dell'esame biologico a fresco.

Lo studio ha avuto finanziamenti: No

Codice: **C73**

EFFECTS OF MEDITERRANEAN DIET AND PHYSICAL ACTIVITY INTERVENTION ON SEMEN QUALITY IN HEALTHY YOUNG MEN LIVING IN HIGHLY POLLUTED AREAS IN ITALY: THE FAST RANDOMIZED CONTROLLED TRIAL

Luigi Montano¹, Elisabetta Ceretti², Francesco Donato², Paolo Bergamo³, Claudia Zani², Gaia Claudia Viviana Viola², Tiziana Notari¹, Sebastiana Pappalardo¹, Danilo Zani², Stefania Ubaldi¹, Valentina Bollati⁴, Claudia Consales⁵, Giorgio Leter⁵, Marco Trifuoggi⁶, Angela Amoresano⁶, Stefano Lorenzetti⁷ for the FAST study group

1 Andrology Unit and Service of Lifestyle Medicine in UroAndrology, Local Health Authority (ASL) Salerno, Coordination Unit of the network for Environmental and Reproductive Health (EcoFoodFertility Project), Italy "Oliveto Citra Hospital", Salerno, Italy; b PhD Program in Evolutionary Biology and Ecology, University of Rome Tor Vergata, Rome, Italy;

2 Unit of Hygiene, Epidemiology and Public Health, and Unit of Urology, Department of Medical and Surgical Specialties Radiological, University of Brescia, Brescia, Italy;

3 Institute of Food Sciences, National Research Council (CNR-ISA), Avellino, Italy;

4 Epidemiology, Epigenetics and Toxicology (EPIGET) Lab, Department of Clinical Sciences and Community Health, University of Milan, Milan, Italy;

5 Laboratory of Health and Environment, Division of Health Protection Technologies, ENEA Casaccia Research Center, Rome, Italy;

6 Department of Chemical Sciences, University of Naples Federico II, Complesso Universitario Monte S. Angelo, Naples, Italy;

7 Department of Food Safety, Nutrition and Veterinary Public Health, Italian National Institute of Health (ISS), Rome, Italy.

Introduction and aims

Human semen quality is affected by metabolic, lifestyle and environmental factors. The latter may be responsible for low semen quality and for substantial differences in different areas of the same country or region in relation to the environmental pressure conditions of the territories. The aim of this study (Fertilità, Ambiente, Stili di Vita, FAST Study, grant of Italian Ministry of Health) was to evaluate the short-term effects of mediterranean diet and physical activity intervention on semen quality of healthy young men living in three highly polluted areas of Italy (Brescia-Caffaro, Sacco River Valley, Land of Fires).

Materials and methods

344 healthy young men (18-22 years) were enrolled and after randomization 1:1, 188 were allocated to lifestyle change intervention group (4-month Mediterranean diet pathway and a program of moderate physical activity) and 156 were allocated to control group. The two groups were homogeneous at baseline, indeed, showed no significant differences with regard to general characteristics, adherence to the Mediterranean diet, level of physical activity, semen Total Antioxidant Capacity (TAC) and semen parameters.

Results Of the 344 subjects enrolled, 263 subjects (76%) completed the follow-up attending all visits, undergoing examinations and laboratory analyses: 137 in the intervention group and 126 in the control one. The adherence to Mediterranean diet and physical activity level increased more in the intervention than control group from start (t0) to the end (t4) of the study period (t-tests for unpaired data at t4: $p < 0.0001$ and $p = 0.03$, respectively). Sperm concentration, total and progressive motility and proportion of normal morphology cells increased in the intervention but decreased in the control group, with statistically significant differences between the two groups at t4 ($p = 0.03$; $p = 0.0001$; $p = 0.0003$; $p = 0.002$, respectively). The TAC increased in the intervention but decreased in the control group, the difference between the two groups being next to the threshold of the statistical test at t4 ($p = 0.08$).

Conclusions Study results showed that an intervention based on Mediterranean diet and regular physical activity determine an improvement of semen quality in healthy young men. To our knowledge, our study is the first Randomized Controlled Trial to evaluate the effects of a dietary and physical activity intervention on semen quality of healthy young men.

Codice: **C74**

TECNICA INNOVATIVA DI TRATTAMENTO DEL VARICOCELE NELL'ETÀ PEDIATRICA E ADOLESCENZIALE: ANGIOGRAFIA CON EMBOLIZZAZIONE SENZA UTILIZZARE LA SCLEROTIZZAZIONE. RISULTATI DI UN ANNO DI ATTIVITÀ.

Matteo Sulpasso¹, Camillo Aliberti²

¹ Responsabile U.O. di Chirurgia Pediatrica Ospedale Pederzoli, Peschiera del Garda (VR)

² Direttore Dipartimento di Radiologia Diagnostica ed Interventistica Ospedale Pederzoli, Peschiera del Garda (VR)

Introduzione Il trattamento mediante sclero-embolizzazione è praticato attivamente da più di 20 anni e viene eseguito dal Radiologo Interventista con la collaborazione del chirurgo.

Lo sviluppo tecnologico nel campo dei dispositivi medici ha comportato la possibilità di utilizzare microcateteri di calibro estremamente ridotto (2,8/2,4F) che consentono il cateterismo selettivo della vena spermatica sino alle sue diramazioni più prossime.

Materiale e Metodi Tale innovazione, associata all'utilizzo di spirali embolizzanti caratterizzate dal ridotto calibro del filamento, (0,16 inc) in grado di essere introdotte nel microcatetere con amplissima capacità di espansione (sino a 12mm di diametro x 400mm di lunghezza) ha permesso l'evoluzione di tale metodica di trattamento. Le spirali sono di Nitinol (Nichel-Titanio) con rivestimento idrofilico di gel.

Una volta effettuato il cateterismo della vena spermatica, si effettua una flebografia a bassa pressione finalizzata alla visualizzazione, con estrema precisione, del distretto venoso spermatico ed alla individuazione delle vene maggiormente ectasiche ed incontinenti e di eventuali diramazioni accessorie. Vengono, quindi, rilasciate con assoluta precisione una o più spirali che modellandosi, grazie all'estrema flessibilità del materiale di cui sono costituite, consentono l'immediata occlusione dei vasi non rendendo necessaria l'infusione dello sclerotizzante che è alla base delle complicanze ed effetti collaterali di tale tipologia di trattamento.

Risultati In un anno di attività sono stati sottoposti a tale tecnica 180 pazienti, con un range compreso tra i 13 e i 20 anni, conseguendo ottimi risultati. Non c'è stata nessuna complicazione, i pazienti vengono dimessi dopo 1-2 ore massimo. Solo nel 5% dei casi è stato necessario un secondo trattamento angiografico a distanza di 6 mesi.

Conclusioni Tale evoluzione del trattamento permette di ridurre l'invasività dello stesso in termine di effetti collaterali, ne incrementa l'efficacia in quanto l'occlusione è estremamente prossimale e selettiva e permette l'utilizzazione di tale tecnica già dai 13 anni di età.

Tale tecnica non richiede nessun tipo di anestesia se non eventualmente locale a livello dell'ingresso venoso.

VIDEO

Codice: **V01**

WATERABLATION OF THE PROSTATE FOR THE TREATMENT OF LOWER URINARY TRACT SYMPTOMS IN MEN WITH BENIGN PROSTATIC HYPERPLASIA: FIRST ITALIAN MULTICENTER EXPERIENCE AFTER 1-MONTH OF FOLLOW-UP

Giorgio Ivan Russo², Ettore Di Trapani⁶, Gennaro Musi⁶, Gabriele Cozzi⁶, Ottavio De Cobelli⁶, Marco Rinaldi³, Paolo Minafra⁷, Gaetano De Rienzo⁴, Sebastiano Cimino², Paolo Verze⁵, Vincenzo Mirone⁵, Vincenzo Morgera⁵, Lorenzo

Bianchi³, Gianmartin Cito¹, Marco Borghesi³, Marco Guerra³, Riccardo Schiavina³, Eugenio Brunocilla³, Matteo Salvi¹, Agostino Tuccio¹, Mauro Gacci¹, Marco Carini¹, **Andrea Cocci¹**

1 Department of Urology, Careggi Hospital, University of Florence, Florence, Italy

2 Department of Urology, University of Catania, Catania, Italy

3 Department of Urology, University of Bologna, Bologna, Italy

4 Department of Urology, University of Bari, Bari, Italy

5 Department of Urology, University of Naples, Naples, Italy

6 European oncology institute, Milan, Italy

7 Affidea Modena medica, Modena, Italy

Introduction and objectives Transurethral resection of the prostate (TURP) is considered the gold standard for minimally invasive treatment of lower urinary tract symptoms due to benign prostate enlargement of <80ml. However, new technologies are facing and waterablation is gaining new interest in treating lower urinary tract symptoms (LUTS) secondary to benign prostatic hyperplasia (BPH). The Aquabeam system uses high-velocity water jets to robotically ablate prostatic tissue under real-time ultrasound guidance, with hemostasis achieved via a catheter balloon tamponade and a novel traction device or electrocautery.

Materials and methods Waterablation was performed in 36 patients with symptomatic BPH in a multicenter prospective study. Baseline, peri-operative and 1-month urinary function data were collected, including uroflowmetry, international prostate symptom score (IPSS), IPSS-Quality of life (IPSS-QoL) and post void residual (PVR).

Results Mean age was 67.5 (SD 1.83), baseline mean IPSS was 20.4 (SD 1.15), baseline mean peak flow was 9.05 (SD 0.65) and mean prostate volume was 85.9 cc (SD 6.08). After 1 month of surgery, mean change of peak flow was +7.94 ml/s (SD 1.51)($p<0.01$), of IPSS was -10.2 (SD 2.06)($p<0.01$), of PVR -80.2 cc (SD 26.26) ($p<0.01$) and IPSS-QoL was -2 (SD 4.11)($p<0.01$). Median of catheterization (days) was 3.0 (SD 3.1) and median of hematuria 1.0 (SD 1.33) while the

rate of post-operative antegrade ejaculation was 80.0% (30/6).

Conclusions We showed the first Italian multicenter experience for Waterablation to treat LUTS/BPH. Although the low number of treated patients and the low learning curve among center, the procedure was demonstrated to be safe and effective. Interesting, the rate of antegrade ejaculation is higher than other procedures reported in literature.

Lo studio ha avuto finanziamenti: No

Codice: **V02**

RESEZIONE CUTANEA, LIPECTOMIA SOVRAPUBICA, SCROTOPLASTICA E INNESTO CUTANEO IN PAZIENTE CON LICHEN SCLEROATROFICO ASSOCIATO A FALSA BREVITÀ PENIENA

Javier Romero Otero¹, José Medina Polo¹, Manuel Alonso Isa¹, Borja García Gómez¹, **Celeste Manfredi**^{1,2,3}

1 Andrological and Reconstructive Surgery Unit, Department of Urology, Hospital 12 de Octubre, Madrid, Spain

2 Urology Unit, Department of Neurosciences, Reproductive Sciences, and Odontostomatology, University of Naples "Federico II", Naples, Italy

3 Urology Unit, Department of Woman Child and of General and Specialist Surgery, University of Campania "Luigi Vanvitelli", Naples, Italy

Video di intervento di chirurgia ricostruttiva complessa del pene in paziente con lichen scleroatrofico del prepuzio associato a falsa brevità peniena.

Lo studio ha avuto finanziamenti: No

Codice: **V03**

GLANSECTOMY WITH SPLIT-THICKNESS SKIN GRAFT RECONSTRUCTION AND LAPAROSCOPIC-ASSISTED SUPERFICIAL INGUINAL LYMPH NODE DISSECTION

Marco Falcone, Marco Oderda, Mirko Preto, Lorenzo Bertolino, Massimiliano Timpano, Ceruti Carlo, Omidreza Sedigh, Paolo Gontero

AOU Città della Salute e della Scienza - S.C. Urologia

Introduction and aim Penile cancer is a rare oncological pathology. However, in tertiary reference centers, the number of patients sent for this pathology is increasing. Although for the main lesion (T) there are now consolidated standards of care, the management of loco-regional lymph nodes is still not completely standardized. Our aim is to report the surgical steps of a glansectomy with split-thickness skin graft reconstruction and laparoscopic-assisted superficial inguinal lymph node dissection.

Material and methods A 72 years old man previously underwent a wide local excision of a peri-meatal lesion of the glans (pT2 squamous cell carcinoma with positive surgical margins, cN0: no palpable inguinal nodes bilaterally). The different surgical steps are reported in the video.

Results A subcoronal incision is performed and the penis is degloved. The dorsal neurovascular bundle is carefully isolated. Major penile vessels are ligated: the right and left dorsal artery, and the deep dorsal vein. The apex of the corpora cavernosa is isolated, and the urethra is transected. A frozen section of the apex and the distal urethra is performed intraoperatively. The urethra then is spatulated. A STSG is harvested from the thigh and used to reconstruct the glans. The second part of the video shows the laparoscopic-assisted superficial inguinal lymph node dissection. The first trocar is placed at the apex of the Scarpa's triangle. A 10-mm Hasson trocar is used. A very superficial incision is performed with a 11-blade scalpel: the fascia lata must remain intact. CO2 insufflation at 10-mmHg creates the working space. Two 5-mm trocars are placed in triangulation, under digital guidance. The space is created with blunt dissection and use of 5-mm Ligasure. The roof of dissection is then identified: care must be paid not to devascularize the skin. Fascia lata is the floor of the dissection. The saphenous vein is identified, and the dissection is performed. The superficial nodal package is progressively isolated and removed "en block", with sparing of

the saphenous vein. Final histology: pT2 squamous cell carcinoma, negative surgical margins, and pN1 (a single positive node on right groin).

Conclusions Few studies have evaluated the oncological and functional results of inguinal lymphadenectomy performed with video-laparoscopic instruments. First results seem to support minimally invasive approach, that appears to have comparable oncological results and less post-operative morbidity.

Lo studio ha avuto finanziamenti: No

Codice: **V04** - ASSENTE

Codice: **V05**

MACROPENE CIRCUMFERENZIALE ACQUISITO: CORPOROPLASTICA RIDUTTIVA “GEOMETRICA” CON RINFORZO IN PERICARDIO BOVINO

Edoardo Pescatori₁, Barbara Drei₁, Salvatore Rabito₂

1 Servizio di Andrologia, Hesperia Hospital – MODENA

2 UO Urologia, Hesperia Hospital – MODENA

Si descrive correzione chirurgica di raro caso di cedimento strutturale dell'albuginea di entrambi i corpi cavernosi, esteso per pressochè tutta l'asta con risparmio di pochi centimetri alla base, con risultante incremento circumferenziale del pene tale da rendere impossibile una completa attività sessuale penetrativa.

Caso clinico: paziente di 55 anni con sviluppo senza causa apparente di deformazione simil-aneurismatica del pene gradiente circumferenziale di 7,5 cm tra terzo distale e terzo medio dell'asta. Rigidità conservata. Iter diagnostico: cavernosometria/-grafia dinamica e RNM basale e dinamica, con conferma di dilatazione aneurismatica di entrambi i corpi cavernosi.

Tecnica chirurgica: incisione circumferenziale e degloving dell'asta, estrusione dell'asta tramite incisione scrotale.

Bilateralmente incisioni parauretrali a tutta lunghezza della fascia di Buck e completo scollamento della stessa - con nel suo contesto il fascio neurovascolare dorsale - dai corpi cavernosi. Erezione indotta: albuginea assottigliata nell'area di cedimento strutturale. Misurazioni circumferenziali seriate e calcolo della riduzione circumferenziale da ottenere.

Consequente asportazione bilaterale di losanghe di albuginea. Punti di ancoraggio introflettenti in Biosyn rinforzati da continua incavigliata in PDS. Confezionamento di patch in pericardio bovino a coprire l'intera circonferenza dell'albuginea denudata, ad eccezione del corpo spongioso uretrale, fissato con punti di ancoraggio all'albuginea.

Ricostruzione di fascia di Buck. Reinserimento dell'asta nel proprio involucro cutaneo.

Circoncisione formale.

Il paziente ha ripreso attività coitale soddisfacente a 2 mesi dall'intervento.

Lo studio ha avuto finanziamenti: No

Codice: **V06**

VAGINOPLASTICA IN PAZIENTE AFFETTA DA ATRESIA VAGINALE

Fulvio Colombo₁, **Giorgio Gentile**₂, Alessandro Francheschelli₁, Franco Palmisano₁, Roberto Olinas₂

1 SSD Andrologia, Az-Osp. S. Orsola- Malpighi, Bologna, Italy

2 Urology Dept, Städtisches Klinikum Lüneburg, Germany

Questo video illustra un intervento di ricanalizzazione vaginale in una paziente affetta atresia vaginale

La paziente, di 21 anni, libica, lamentava dal periodo adolescenziale forti crampi addominali e non aveva mai avuto mestruazioni, all'esame obiettivo eseguito per la prima volta dai colleghi ginecologi appariva evidente l'assenza di introito vaginale.

Gli esami di imaging pre operatori dimostravano la presenza di un normale apparato genitale e di una marcata dilatazione del tratto vaginale prossimale a fondo cieco.

L'intervento consiste in una incisione mucosa suburetrale con identificazione di un piano di clivaggio che viene sviluppato per via smussa e tagliente sino al raggiungimento del cul di sacco vaginale al livello del tetto del canale neoformato. Si prosegue con puntura del cul di sacco con identificazione di sangue mestruale che viene prima aspirato mediante siringa e poi evacuato dopo incisione del cul di sacco. Si procede quindi a ricanalizzazione vaginale con rivestimento mucoso del tramite confezionato chirurgicamente. L'intervento termina con il posizionamento di un tutore vaginale gonfiabile che viene mantenuto per 48 h

Nel periodo post operatorio la paziente viene addestrata ad eseguire dilatazioni vaginali con appositi strumenti progressivi e a mantenere il tutore vaginale gonfiabile durante la notte. Alla rimozione del catetere vescicale si apprezza completa continenza urinaria

Dopo 6 mesi di Follow up la paziente dimostra un buon risultato estetico, completamente soddisfacente, prosegue la dilatazioni con dilatatori vaginali di calibro maggiore e riferisce di non aver ancora iniziato attività sessuale penetrativa; attualmente il ciclo mestruale avviene regolarmente con risoluzione dei dolori addominali.

Lo studio ha avuto finanziamenti: No

Codice: **V07**

SINGLE VENTRAL GRAFT CONVERTED IN VENTRAL PLUS DORSAL DOUBLE GRAFTING FOR BULBAR URETHROPLASTY

Enzo Palminteri¹, Mirko Preto¹, Maria Chiara Clementi¹, Federica Mazzoleni¹, Omid Sedigh², Gianluca Milan³, Giuseppina Cucchiara³

1 Centro di Chirurgia Uretrale e Genitale – Humanitas Cellini Torino

2 Clinica Urologica, Presidio Molinette - Città della Salute e della Scienza di Torino

3 Dipartimento Urologia – Humanitas Cellini Torino

Gli obiettivi moderni della chirurgia delle stenosi uretrali sono quelli di essere una chirurgia facile, minimamente aggressiva e versatile, consentendo cioè varie opzioni intraoperatorie.

Per noi tutto questo corrisponde all'impiego di un accesso ventrale all'uretra e

all'ampliamento del canale uretrale tramite un innesto ventrale di mucosa buccale.

Comunque, nei casi di stenosi molto serrate, l'intervento di singolo innesto ventrale può essere convertito intraoperatoriamente in un doppio innesto, dorsale più ventrale, di mucosa buccale consentendo un allargamento più ampio dell'uretra.

Nel video vengono descritti gli steps ed i trucchi per rendere questa chirurgia quanto più facile possibile e ridurre i rischi di complicanze.

L'ampliamento con doppio innesto, dorsale più ventrale, di mucosa buccale ha dimostrato una percentuale di successo del 90% in assenza di complicanze sessuali. Di conseguenza questa tecnica si propone come una valida alternativa alle tecniche di sezione e anastomosi termino-terminale che sono invece gravate dal rischio di complicanze sessuali.

Lo studio ha avuto finanziamenti: No

Codice: **V08** - ASSENTE

Codice: **V09**
HEMIGLANS RESURFACING

Luigi Di Luise, Angelo Di Giovanni, Lorenzo Cirigliano, Lorenzo De Stefano, Massimiliano Trivellato, Luigi Napolitano, Roberto La Rocca, Massimiliano Creta, Marco Capece, Alessandro Palmieri

University Federico II of Naples, Italy

Codice: **V10**
MEATOPLASTICA - URETROPLASTICA - RIPARAZIONE FISTOLE - LISI ADERENZE GRANDI LABBRA IN PAZIENTE AFFETTA DA STENOSI SERRATA DEL MEATO URETRALE ESTERNO STENOSI URETRALE DISTALE E FISTOLE MULTIPLE UETRONEOVAGINA ED ADERENZE DELLE GRANDI LABBRA, DOPO INTERVENTO DI VAGINOPLASTICA PENOSCROTALE PER RIASSEGNAZIONE DEI CARATTERI SESSUALI MALE TO FEMALE

Patrizio Vicini, David Mini, Giuseppe Orsolini, Roberto D'Ascenzo

U.O.C Urologia – Ospedale Regina Apostolorum – Albano Laziale (Roma) – Italia

Introduzione Lo scopo del lavoro è presentare la strategia diagnostica e terapeutica per gestione delle complicanze in un caso complesso dopo vaginoplastica con lembo penieno e graft scrotale per rassegnazione dei caratteri sessuali male to female

Materiali e metodi La paziente giunge alla nostra osservazione dopo 9 mesi dall' intervento di vaginoplastica riferendo una sintomatologia cistitica, pollachiurgia, stranguria e disuria, uso notevole del torchio addominale in fase minzionale e fuoriuscita di urina in vagina, progressivo restringimento dell' introito vaginale con difficoltà alle dilatazioni meccaniche effettuate tramite dilatatori consigliati quotidianamente.

All' esame obiettivo presenza di tessuto di granulazione a livello del meato uretrale esterno con stenosi dello stesso, impossibilità all'introduzione di qualsiasi catetere ureterale, presenza di 4 minutissimi tramiti fistolosi in neovagina, presenza di aderenza mediana delle grandi labbra che apparivano fuse lungo la linea mediana costituendo un setto che ostacolava l'introito vaginale.

Impossibilità in fase diagnostica di sondare la stenosi per capirne la lunghezza pre-intervento con catetere uretrale, impossibilità all' effettuazione di Uroflussimetria, Rx uretrocistografia retrograda e minzionale e Uretrocistoscopia.

L'accesso chirurgico da noi effettuato è stato il seguente: mediante incisione cutanea mediana lunga circa 5 cm partendo dal meato uretrale fino ad arrivare ai tramiti fistolosi in neovagina, si effettua isolamento notevolmente difficoltoso ma "completo" dell'uretra per fino ad ottenere un buona mobilizzazione uretrale, l' uretra distale presentava una stenosi di circa 2 cm, il tratto di uretra stenotico viene aperto e spatulato ventralmente per circa 5 cm fino a raggiungere i tramiti fistolosi evidenziabili con estrema difficoltà ma tramite utilizzo di specilli chirurgici in neovagina, riparazione dei tramiti fistolosi con Vicryl 3/0, meatoplastica con riconfigurazione del corretto posizionamento del meato uretrale circa 1-2 cm al di sotto del neoclitoride, successiva incisione mediana cutanea per lisi aderenze delle grandi labbra con sutura trasversale, ampliando in tal modo l' introito vaginale esterno.

Conclusioni La mobilizzazione uretrale ha consentito una corretta riconfigurazione del meato uretrale, l'incisione mediana cutanea per lisi aderenze delle grandi labbra con sutura trasversale ha permesso un ampliamento dell'introito vaginale.

Lo studio ha avuto finanziamenti: No

Codice: **V11**

JOIN-UP URETHROPLASTY IN A TRANSGENDER FEMALE AFTER A RADIAL ARTERY FREE-FLAP PHALLOPLASTY

Marco Falcone, Massimiliano Timpano, Mirko Preto, Lorenzo Bertolino, Ceruti Carlo, Omidreza Sedigh, Paolo Gontero

AOU Città della Salute e della Scienza - S.C. Urologia

Introduction and aim

The aim of our study is to report the surgical steps of the join-up urethroplasty after a radial artery free-flap phalloplasty in the context of a genital gender affirming surgery.

Material and methods

The procedure is routinely performed 6 months after total phallic construction. The urethroplasty is performed in the same stage of the glans sculpting. The different surgical steps are reported in the video.

Results

The urethral plate is incised and mobilized. Urethra is closed on a 16 F catheter in a 2-layers fashion. Clitoris is disepithelized and buried at the base of the phallus. A vaginal flap is rotated from anterior vagina wall to create the proximal-end of the neo-urethra. A Martius fat pad is rotated over the urethra to reduce the risk of fistula formation. Vaginal introitus is excised in a "diamond-shaped" fashion. Vaginal mucosa is ablated with diathermy vaporization and closed. A suction drain is left in place for 72 hours. Bladder catheter is removed after 7 days. A suprapubic catheter is left in place for 4 weeks. A voiding urethro-cystography is performed before its removal to check neo-urethra patency and the absence of fistulas.

Conclusions

Join-up urethroplasty is a complex reconstruction aiming to let transgender females urinating in orthostatic position.

Lo studio ha avuto finanziamenti: No

Codice: **V12**

IMPENDING EROSION IN PENILE PROSTHESIS: TECHNICAL NOTES

Giacomo Rebez, Giovanni Liguori, Michele Rizzo, Riccardo Boschian, Carlo Trombetta, **Fabio Traunero**

Clinica Urologica Università di Trieste

Introduction Impending erosion of penile prosthesis is an uncommon complication, which can be managed with conservative re-implantation techniques, if the tunica albuginea is intact.

Materials and Methods With a peno-scrotal access, the right corpus cavernosum is opened. The right cylinder is extracted and the corpus cavernosum is washed according to the Mulcahy protocol. The corpus cavernosum is dilated with Brook's dilators in order to create a new space for the cylinder re-implantation. After the insertion, the cylinder's tip is still laterally dislocated. Circumcising incision is made and the distal corpora are exposed. A lateral longitudinal corporotomy is made in the area of impending erosion and the inflatable cylinder is retracted. The posterior wall of the fibrotic capsule containing the cylinder is incised transversely and a new medial space is developed between the fibrotic capsule and tunica albuginea with sharp dissection and Brook's dilator. The cylinder is positioned into this new cavity. The corporotomy is closed using long-term absorbable suture. The cylinder is secured in its proper location protected by two layers: the back wall of the original sheath and the corporotomy closure.

Results

No post-operative complications occurred. Prosthesis was successfully activated 30 days after discharge.

Conclusions

Using this technique, the cylinder can be replaced in its proper position without the use of patch, allowing a more conservative management of this complication.

Lo studio ha avuto finanziamenti: No

Codice: **V13**

MINI-JUPETTE PROCEDURE AT INFLATABLE PROSTHESIS PLACEMENT FOR CLIMACTURIA AND MILD INCONTINENCE MANAGEMENT FOLLOWING RADICAL PROSTATECTOMY: SURGICAL TIPS

Edoardo Pescatori¹, Barbara Drei¹, Davide Dell'Orco²

1 Servizio di Andrologia, Hesperia Hospital – MODENA

2 Tegea - Boston Scientific – MODENA

Descrizione di sling uretrale “Mini-Jupette” eseguito in corso di impianto protesico penieno idraulico tricomponente per trattare incontinenza ad orgasmo (“climacturia”) e deficit erettile severo dopo prostatectomia radicale.

Caso clinico: paziente di 71 aa status/post prostatectomia radicale robotica e successiva radioterapia di salvataggio, fortemente motivato a ripresa attività coitale penetrativa, nonostante modica incontinenza e climacturia.

Si esegue intervento di Mini-Jupette sec. Andrianne. Incisione scrotale trasversa come da impianto protesico con accesso penoscrotale; esecuzione di corporotomie latero-caudalmente rispetto a impianto standard. Misurazione di distanza tra i margini mediali delle corporotomie e confezionamento di mesh in polipropilene (Pro-Lite, ATRIUM) di misure corrispondenti. Sutura dello stesso in continua alle due corporotomie (margini mediani) e verifica di appropriata tensione. Inserimento standard di protesi idraulica tricomponente. Chiusura corporotomie in continue. Protesi lasciata disattivata. In prima giornata: rimozione catetere e drenaggio, e dimissione.

Follow-up precoce: completa risoluzione di incontinenza, e ripresa di attività coitale senza climacturia.

A termine video vengono illustrati i principali caveat di questa procedura, alla luce della limitata letteratura disponibile e della prima esperienza personale.

Lo studio ha avuto finanziamenti: No

Codice: **V14**

EXCISION OF PUBIC SARCOMA AND COMPLEX GENITAL RECONSTRUCTION

Marco Falcone¹, Davide Ciclamini², Beatrice Lillaz¹, Raimondo Piana³, Mirko Preto¹, Massimiliano Timpano¹, Lorenzo Bertolino¹, Omidreza Sedigh¹, Ceruti Carlo¹, Sergio Sandrucci⁴, Paolo Gontero¹

1 AOU Città della Salute e della Scienza - S.C. Urologia

2 A.O.U. Città della Salute e della Scienza - U.O.S.V.D. Microchirurgia Ricostruttiva

3 A.O.U. Città della Salute e della Scienza - S.C. Ortopedia Oncologica e Ricostruttiva

4 AOU Città della Salute e della Scienza - S.S.D. Chirurgia dei sarcomi e dei tumori rari viscerali

Introduction and aim The aim of our study is to report the surgical steps of an excision of a pubic sarcoma and the subsequent complex genital reconstruction.

Material and methods The patient is a 64 years old man, with a progressive increase in volume of a pubic mass in the last 3 years. The US-guided biopsy showed a high-grade mesenchymal sarcoma. We performed the pubic mass excision and the genital and abdominal reconstruction with ALT perforator flap and split thickness graft. The different surgical steps are reported in the video.

Results The MRI images and the surgical margins of the excision are shown. A subcoronal incision of the penis is performed. The scrotal flaps, the testis and the spermatic chord are isolated. The penis is transposed under the pubic skin, and the mass is excised. A partial pubectomy is then performed. The scrotum is reconstructed, and a mesh is used to reconstruct the abdominal fascia. The hypogastric defect is measured. Then, a left ALT perforator flap is designed, in order to cover the abdominal defect. The perforator vessels are carefully isolated, such as the descending branch of LCFA. The flap is transposed under the rectus femoris, the sartorius muscles, and a skin bridge, and then sutured to the abdominal wall. A STSG is harvested from the contralateral thigh in order to reconstruct the penile skin.

Conclusions The final histology showed a high-grade spindle cell sarcoma, with negative surgical margin. No adjuvant treatment is indicated.

Lo studio ha avuto finanziamenti: No

Codice: **V15**

STUDER POUCH IN PATIENT WITH PENILE PROSTHESIS IMPLANT

Giacomo Rebez¹, Lorena Di Marco¹, Giovanni Liguori¹, Rossana Bussani², Michele Rizzo¹, Nicola Pavan¹, Carlo Trombetta¹

¹ Dipartimento di Urologia Università degli Studi di Trieste

² Anatomia patologica Università degli studi di Trieste

Radical cystectomy with urinary diversion is the treatment of choice for muscle-invasive and selected patient with non-invasive, urothelial carcinoma of the bladder. Orthotopic neobladders (ONB) have been widely performed and described throughout literature; the selection of a patient for an ONB reconstruction is strict as not everyone may be suitable to undergo this complex surgery: patients must be not only mentally competent but also healthy enough to allow for appropriate neobladder training post-procedure.

Our patient was a 69-year-old Caucasian man with BCG refractory carcinoma-in-situ (CIS) and non-invasive high grade urothelial carcinoma of the bladder. His past medical history was significant for hypertension, smoking, cholecystectomy, and he had an IPP inserted remotely for the treatment of his organic ED and Peyronie's disease.

He underwent a radical cystectomy with a Studer pouch. Intraoperatively, the reservoir was located within a pseudocapsule in the right lower quadrant next to the right inguinal ring; it was removed prior to performing pelvic lymphadenectomy and radical cystectomy with urinary diversion, irrigated with povidone-iodine and placed in antibiotic solution, while the connecting tubing was clamped for the duration of the surgery.

Peri-operatively, a beta-lactamic antibiotic was administered as prophylaxis.

Functionality of the IPP was verified intraoperatively and post-operatively on follow-up. At last follow-up, the patient had organ-confined disease and no radiologic evidence of disease recurrence; axial imaging of the pelvis demonstrated a well-seated reservoir in the right hemipelvis.

Patients eligible to ONBs are often under 65-years old. However, older age is not a contraindication and older patients who have good physical and cognitive capacity may be able to manage the post-operative management. Patient didn't report a prosthetic infections: given the risk of introduction of bacteria with the manipulation of the reservoir intraoperatively, we believe that this is an important result.

In addition to the continence goals, performing radical cystectomy in patient with preexisting IPP seemed to maintain the previous penile length, improved body image perception and a better post-operative sexual function.

ONB reconstruction remains an important procedure that is still evolving, with improvements to both oncological control and patient functional status.

Lo studio ha avuto finanziamenti: No

Codice: **V16**

CIRCUMCISION OF ADULT MALES WITH A CIRCULAR STAPLER: PRELIMINARY RESULTS OF THE CIRCUMSAFE DEVICE

Andrea Cocci¹, Esaù Fernandez Pascual², Juan Ignacio Martinez Salamanca², Gaia Polloni³, Gianmartin Cito¹, Andrea Romano¹, **Nicola Mondaini⁴**

1 Department of Urology, Careggi Hospital, University of Florence, Florence, Italy

2 Hospital Universitario Puerta de Hierro-Majadahonda, Department of Urology, Madrid, Spain

3 Psychosexuologist, Como, Italy

4 Villa Donatello Hospital, Andrology Center, Florence, Italy

Introduction and objectives The single-use stapler for circumcision (CircCurer TM) is a single-phase device that complete the separation of the fimotic ring and haemostasis in a single step, using a mechanism similar to end-to-end circular staplers used in intestinal procedures. The purpose of this study is to describe our preliminary results following the use of circumSAFE device in terms of surgical outcomes and short-to-medium term complications.

Materials and methods From June 2018 to June 2019 we analysed the surgical outcomes and the short-to-medium term complications of patients with phimosis of the foreskin (congenital and acquired). No patients had ongoing comorbidities. All the patients underwent circumcision using CircCurer TM system device. The circumSAFE device is composed of a stapler gun, a safety bell and two plastic strips. The procedure is performed under local anaesthesia and consists of inserting the safety bell into the foreskin, securing it with plastic strips. The procedure ends after joining the stapler gun to the safety bell, that is activated by prolonged pressure of the handle, determining the cutting of the foreskin and its suturing through the apposition of metal clips. It is possible, during the procedure to make a plastic of the frenulum in the case of a short frenulum.

Results 36 patients (mean age 36 years) underwent circumcision. No surgical revisions were required. Two complications (5.5%) were reported: a localized peri-sutural hematoma that needed a manual drainage and a large hematoma of the penis, spontaneously absorbed in 30 days.

Conclusions The use of the circumSAFE device proved to be effective and safe in terms of surgical outcomes with low risk of complications in young patients without comorbidity. Further studies with a larger study population compared to a control group undergoing the standard circumcision technique are needed to evaluate the superiority of this technique in terms of cost effectiveness.

Lo studio ha avuto finanziamenti: No

Codice: **V17**

INCISIONE SECONDO BIKINI RIVISITATA NELL' ORCHIECTOMIA PER CANCRO

C. Franzese, **M. Polito**

Clinica Urologica, Azienda Ospedaliero-Universitaria "Ospedali Riuniti" di Ancona

Approccio chirurgico con incisione Bikini modificata per orchietomia un pazienti co ncarcinoma testicolare.

Lo studio ha avuto finanziamenti: No

Codice: **V18** - ASSENTE

Codice: **V19**

CASE REPORT: UTILIZZO PROLUNGATO DI FOLLITROPINA ALFA IN PAZIENTE MASCHILE ACROMEGALICO AFFETTO DA IPOGONADISMO IPOGONADOTROPO. CONSIDERAZIONI CLINICHE ED ASSISTENZIALI.CASE REPORT: UTILIZZO PROLUNGATO DI FOLLITROPINA ALFA IN PAZIENTE MASCHILE ACROMEGALICO AFFETTO DA IPOGONADISMO IPOGONADOTROPO. CONSIDERAZIONI CLINICHE ED ASSISTENZIALI.

Lucenti Luca¹, Rossella Maria Campagna², Sabrina Arena¹

¹ U.O.C. Farmaceutica Territoriale ASP Ragusa

² Dipartimento Strutturale del Farmaco ASP Catania.

Introduzione ed obiettivi Nell'uomo l'uso delle gonadotropine ha un razionale nella terapia dell'ipogonadismo ipogonadotropo, dove il deficit di gonadotropine è il responsabile dell'assenza di spermatogenesi, e la somministrazione di tali farmaci, può portare ad un incremento di spermatozoi nel liquido seminale. La nota Aifa 74, si suggerisce di non superare il dosaggio di 150 unità internazionali (UI) di FSH 3 volte alla settimana per 4 mesi. Se dopo tali trattamenti non si ottiene un risultato positivo nel trattamento dell'infertilità, altri cicli terapeutici possono potenzialmente generare rischi superiori ai benefici attesi. Tuttavia, viene rilevato dai monitoraggi di competenza della nostra Struttura, terapia a lungo termine in paziente maschio, 46 anni, con FSH inferiore a 8 mUI/ml, acromegalico con ipogonadismo come secondarismo. Dopo approfondimento del caso e colloqui con il clinico prescrittore, lo stesso ha interrotto temporaneamente prescrizioni, in linea alla nota 74.

Materiali e metodi Tramite software Webdpc® e altri database amministrativi, in aggiunta al monitoraggio dei piani terapeutici cartacei, sono state analizzate le prescrizioni riferite al paziente esaminato, nel periodo 2014-2020.

Risultati Oltre alla prescrizione appropriata di octreotide per acromegalia, da giugno 2016 a novembre 2020, viene prescritta in maniera continuativa da Unità di Endocrinologia di Azienda Ospedaliera extra regionale, follitropina alfa al dosaggio di 150 UI tre volte a settimana.

Conclusioni Un trattamento così prolungato risulta atipico rispetto alle normali condizioni di utilizzo, anche perché sulla base delle prescrizioni rilevate, sembrerebbero assenti periodi di washout. Studi clinici fanno riferimento a trattamento per almeno 18 mesi per indurre la spermatogenesi, ma nel nostro caso abbiamo un dato che va ben oltre tale periodo. Questa analisi in real word, ha comunque attestato come outcome, insuccesso terapeutico considerando come endpoint la gravidanza, ma anche una elevata sicurezza d'uso nel lungo termine, per assenza di eventi avversi importanti. Considerato il secondarismo all'acromegalia, una scelta come terapia sostitutiva cronica, andrebbe comunque inquadrata in un contesto di utilizzo al di fuori delle condizioni di rimborsabilità dettate dalla nota 74, che comunque sconsiglia lunghi trattamenti. Importante infine il feedback tra clinico e farmacista, grazie al quale si individua il percorso assistenziale più adatto al paziente.

Lo studio ha avuto finanziamenti: No

Codice: **V20**

EVALUATION OF ANTI-H1 ANTIHISTAMINES EFFECTS ON HUMAN SPERM

Elena Maria Scalisi¹, Roberta Pecoraro¹, Martina Contino¹, Giorgia Paternò¹, Paola Asero², Giovanni Bracchitta³, Maria Violetta Brundo¹

¹ Department of Biological, Geological and Environmental Sciences, University of Catania, Catania, Italy;

² Centro Biomedico ASTER, Catania, Italy

³ U.O. Fisiopatologia della Riproduzione Umana - Clinica del Mediterraneo, Ragusa, Italy

Introduction and aims Human male infertility is a major health problem that affects approximately 10-15 % of couples worldwide. It is a multifactorial syndrome encompassing a wide variety of anatomic disorders. During clinical diagnostic

the use of drugs by the infertile subject, is often underestimated. However, recent studies have shown that different drugs can interfere with fertility. Alkylating drugs (cancer therapy), drugs for inflammatory gastric diseases (anti-H2 antihistamines), psychotropic drugs (alter the quality of seminal fluid), antibiotics and NSAIDs may put men at higher risk of infertility. Nowadays, antihistamines are a class of drug wide used because seasonal allergies are common between population, then the antihistamines could be used extensively for a long-time term. Antihistamines are able to counteract, reduce or eliminate the effects mediated by histamine at H1 receptors, because they are acting as inverse agonists combining and stabilizing the inactive conformation of the receptors. The aim of our study is assess the effect of antihistamines, such as promethazine and diphenhydramine, on male fertility to evaluate their effect on male reproductive capacity.

Materials and Methods Sperm samples were collected by masturbation after 3–5 days of sexual abstinence from donors fertile men and exposed to increasing concentrations of the active principles promethazine and diphenhydramine. We have chosen the concentrations of 20mM, 40mM and 80mM for diphenhydramine, while the concentrations of 5mM, 10mM, 20mM and 40mM were chosen for promethazine. Their effects on human spermatozoa were evaluated through the analysis of motility, vitality, chromatin fragmentation and identification of anomalies affecting acrosome. Moreover we have carried out an immunofluorescence assay to show the localization of H1-receptors in the spermatozoa membrane.

Results We have shown that diphenhydramine has a greater effect on viability ($EC_{50}=4,66mM$) than that of promethazine ($EC_{50}=5,11mM$). Promethazine, on the other hand, is more toxic for motility ($EC_{50}=7,06mM$) compared to diphenhydramine ($EC_{50}=16,07mM$). Over time, there is an increase of DNA fragmentation and acrosome damage with both antihistamines. We have shown that H1-receptor is localized on the mid connecting piece and on the tail of spermatozoa.

Conclusion These results highlight that the exposure to antihistamines can have cytotoxic effects with potentially drastic consequences for the reproductive success.

Lo studio ha avuto finanziamenti: No

Codice: **V21**

CORRELAZIONE TRA TERATOZOOSPERMIA E OUTCOME RIPRODUTTIVO IN PAZIENTI CHE ACCEDONO A TECNICHE DI FECONDAZIONE ASSISTITA (ARTS): REVISIONE SISTEMATICA E METANALISI

Martina Contino¹, Paola Asero², Elena Maria Scalisi¹, Roberta Pecoraro¹, Giovanni Bracchitta³, Maria Violetta Brundo¹

¹ Department of Biological, Geological and Environmental Sciences, University of Catania, Catania, Italy;

² Centro Biomedico ASTER, Catania, Italy ³ U.O. Fisiopatologia della Riproduzione Umana - Clinica del Mediterraneo, Ragusa, Italy

Introduzione ed obiettivi

La morfologia degli spermatozoi è uno dei parametri convenzionali ritenuto marker di qualità gametica. Nella quinta edizione dell'WHO per l'esame del liquido seminale è stato pubblicato il limite inferiore di riferimento corrispondente al 4%. I soggetti che presentano una percentuale inferiore al limite definito vengono considerati sub-fertili. Obiettivo di questo lavoro è stato valutare la correlazione tra morfologia nemaspermica e tasso di gravidanza in coppie che accedono alle tecniche di fecondazione assistita.

Materiali e metodi Abbiamo condotto una revisione sistematica includendo una metanalisi ovvero una analisi statistica dei risultati degli studi indipendenti e produrre un' unica stima del dato in analisi. La revisione è stata condotta su lavori di letteratura pubblicati tra il 1980 e il 2020. Seguendo le linee guida PRISMA abbiamo selezionato studi in cui i pazienti sono stati suddivisi in due gruppi: NM<4-5% e NM>4-5% (gruppo di controllo). L'outcome di interesse è stato il successo riproduttivo inteso come tasso di gravidanza. La ricerca ha portato all'analisi di 129 articoli. includendo nello studio 3198 pazienti per l'IUI; 5080 pazienti per la FIVET e 3861 pazienti per la ICSI. L'analisi statistica è stata eseguita su Microsoft Excel tramite cui abbiamo calcolato l'Odds Ratio (OR) di ogni studio con un intervallo di confidenza al 95%, mentre il livello di significatività è stato posto come $P<0.05$. Per studiare l'omogeneità tra gli studi è stato effettuato il test Q di Cochran, per l'eterogeneità il test I^2 di Higgins, mentre il test Z è stato eseguito per determinare la significatività del trattamento globale. La rappresentazione della metanalisi e della stima cumulativa degli ORs è stata eseguita costruendo tre diversi forest plot, uno per ogni metodica ART considerata.

Risultati Le stime cumulative degli ORs ottenute per l'IUI, la FIVET e l'ICSI sono state rispettivamente 0.86 (IC=0.70-1.05), 0.87 (IC=0.73-1.03) e 1.63 (IC=1.43-1.85). Nel caso dell'IUI e della FIVET tra il gruppo di controllo e il gruppo in studio la differenza non è risultata statisticamente significativa, nel caso della ICSI il gruppo di pazienti con teratozoospermia ha mostrato un aumento del tasso di gravidanza.

Conclusioni Dai risultati ottenuti si dimostra l'assenza di correlazione tra teratozoospermia e decremento del tasso di gravidanza.

Lo studio ha avuto finanziamenti: No

Codice: **V22**

DISTAL REPAIR OF PENILE PROSTHESIS HERNIATION WITH POLYPROPYLENE MESH REINFORCEMENT

Carlo Ceruti, Omid Sedigh, Massimiliano Timpano, Marco Falcone, Mattia Sibona, Mirko Preto, Emanuele Annunziata*, Michele Notarrigo*, Luigi Rolle, Paolo Gontero

University of Turin, Città della Salute e della Scienza di Torino

* Master in Andrology, University of Turin

Introduction and objectives Structural failures of the tunica albuginea are not rare late complications of penile prosthetic surgery; apical failure is the most frequent clinical presentation, although aneurysms and diastases of the corpora are also possible.

It is mandatory to early recognize and to correct the failure before the complete erosion: in these cases it is possible to repair the albuginea, with or without the aid of biomaterials, and to preserve the prosthetic implant.

We present our technique and our experience in apicoplasty for wide distal erosions using a polypropylene mesh reinforcement

Materials and Methods

Surgical Technique:

Surgery is performed through a subcoronal incision. The extent of apical dissection depends on the width of the tunical failure: in many cases it is sufficient to dissect the apices from the glans, in others a wider release of the distal corpora with disassembly of the glans is necessary. A conventional Polypropylene hernia mesh is used; the mesh is tailored over the apices avoiding folds and compressions on the urethra and the neurovascular bundle.

Clinical experience

12 patients have been treated and followed up at at least 1 year with clinical control. All the patients presented with apical failure after implantation of inflatable implant (7 cases), malleable implant (4 cases), Apollo Expander (1 case).

Results We didn't report any major (Clavien \geq 3) complication; among grade 2 complications we reported transitory numbness of glans (2), glans blister and/or escara with complete restitutio ad integrum (2), peno scrotal haematoma (3)

No relapses of herniation were recorded and all the patients resumed satisfying penetrative sexual activity. The underlying penile implant made the mesh difficult to palpate, even in deflation state, in the majority of patients.

Discussion

After a previous experience with the use of a porcine dermal graft we shifted to polypropylene mesh in order to obtain better mechanical reliability. No patient reported any discomfort due to the presence of the mesh and we didn't report infections of the mesh so far. The repair using a polypropylene mesh appears to be a reliable solution to definitively treat extensive albugineal failures

Codice: **V23**

RE-ENGINEERING DELLE PROCEDURE PRESCRITTIVE DEI PIANI TERAPEUTICI WEB BASED: ANALISI E STUDIO RETROSPETTIVO OSSERVAZIONALE DEI DATI SULL'INFERTILITÀ MASCHILE NELLA PROVINCIA DI CATANIA DAL MARZO 2018 AL MARZO 2020 OTTENUTI DALL'ESTRAPOLAZIONE DELLA PIATTAFORMA WEBCARE SICILIA

Rossella Maria Campagna¹, Luca Lucenti², Maria Anna D'Agata¹

¹ Dipartimento Strutturale del Farmaco ASP Catania

² U.O.C. Farmaceutica Territoriale ASP Ragusa.

Introduzione ed obiettivi In Italia, il trattamento con FSH esogeno per infertilità maschile idiopatica è prescritto per il miglioramento dei parametri del seme per le coppie sterili, ma non è attualmente noto il dato di utilizzo.

Obiettivo di questo studio è registrare i diversi protocolli terapeutici adottati nei confronti dei partner maschi di coppie infertili residenti nella provincia di Catania attraverso il loro accesso ai diversi centri di andrologia e/o riproduzione medicalmente assistita (pubblici e privati) e verificarne l'appropriatezza.

Materiali e Metodi Abbiamo estrapolato dalla piattaforma Webcare Sicilia le prescrizioni relative alla provincia di Catania nei 24 mesi in osservazione. Per ogni paziente sono stati registrati, su un foglio Excel, sesso, età, centro di infertilità (pubblico o privato), farmaco prescritto, posologia ed eventuale motivazione.

Risultati Su 1621 pazienti trattati con gonadotropine 195 (12%) erano maschi, con un'età media di 36,7 anni. Il 69% dei pazienti si rivolge alla struttura pubblica. 33 pazienti hanno ricevuto una prescrizione con posologia differente da quella classica. Nel periodo osservato sono state fatte solo 15 prescrizioni con motivazione

Conclusioni L'ormone follicolo-stimolante umano (hFSH) è prodotto dalla ghiandola pituitaria anteriore e gioca un ruolo chiave nella regolazione della fertilità sia negli uomini che nelle donne. I farmaci contenenti FSH sono stati usati per decenni per trattare donne e uomini infertili.

In due anni di osservazione abbiamo evidenziato che, nel mercato delle gonadotropine, i maschi trattati assorbono circa il 10%.

Dall'analisi di questi dati possiamo concludere che le prescrizioni sono risultate appropriate.

Analizzando posologie e motivazioni usate sarebbe opportuno rinnovare il dialogo fra payers e clinici per bilanciare autonomia prescrittiva, appropriatezza, e farmacoeconomia per un miglioramento dei servizi offerti ai cittadini.

Lo studio ha avuto finanziamenti: No

Codice: **V24**

SEMINAL ISOPROSTANES AND EMBRYO QUALITY

Daria Noto¹, Elena Moretti¹, Cinzia Signorini¹, Laura Gambera², Anita Stendardi², Amra Mahmutbegovic¹, Andrea Menchiari³, Giulia Collodel¹.

¹ Department of Molecular and Developmental Medicine, University of Siena, 53100 Siena, Italy.

² Fertility Center, AGI Medica, 53100 Siena, Italy.

³ Department of Business and Law, University of Siena, 53100 Siena, Italy.

One of the determining factors for success in assisted reproduction technologies is the embryo quality. Several studies explored the effect of oocyte parameters on embryo quality, but more intriguing is the study of the role of sperm quality in the achievement of the best embryos. It is well known the pivotal role of oxidative stress in male infertility and F2-Isoprostanes (F2-IsoPs), stereoisomers of prostaglandin F2 α generated by the free radical-induced oxidation of arachidonic acid, are one of the markers of lipid peroxidation.

The study was aimed at evaluating the role of seminal isoprostane level and sperm characteristics in relation to the reproductive outcome and embryo quality of 49 selected infertile couples.

Semen analysis was performed following WHO guidelines (2010). The maturity of sperm chromatin was detected by using aniline blue (AB) assay that displays the replacement of histones with protamines. DNA integrity was assessed by acridine orange (AO) test to evaluate the percentage of double/single stranded DNA. Seminal F2-IsoP levels were quantified by gas chromatography- tandem mass spectrometry analysis. Correlations among variables and their impact on in vitro fertilization (IVF) and intracytoplasmic sperm injection (ICSI) outcome were investigated.

The percentage of positive reproductive outcome was 23%. F2-IsoP levels positively correlated with normal double-stranded DNA sperm ($p < 0.001$) and negatively with sperm showing mature chromatin ($p < 0.001$). Patients with positive reproductive outcomes had an increased percentage of sperm with double stranded DNA versus patients with negative outcome ($p < 0.01$). Male patients, whose sperm produced high quality embryo, showed higher semen F2-IsoP levels than those observed in the group with low quality embryo.

F2-IsoPs are a sensitive marker of sperm immaturity detected with AB assay. An intriguing relationship between a mild increase in F2-IsoP levels, DNA integrity and embryo quality seem to indicate that non-enzymatic oxidation of arachidonic acid can be also a marker of metabolic activity in human semen and a slightly low level can be necessary to obtain good embryo quality.

Lo studio ha avuto finanziamenti: No