

comparison ( $p = 0.038$ ,  $\eta^2p = 0.675$ ,  $\omega^2p = 0.515$ ), and significant post-hoc differences were found (Pre vs Post:  $p = 0.161$ , and Post vs Follow Up:  $p = 0.0043$ ). We found a reduction in progesterone concentration from Pre to Post expedition ( $p = 0.049$ ,  $\eta^2p = 0.364$ ,  $\omega^2p = 0.274$ ) with Italians having a greater reduction ( $p = 0.081$ ,  $\eta^2p = 0.502$ ,  $\omega^2p = 0.340$ , from  $0.550 \pm 0.339$  to  $0.302 \pm 0.093$  ng/ml) respect to Nepalese porters (from  $0.410 \pm 0.163$  to  $0.337 \pm 0.188$  ng/ml). At Follow up Italians recovered up the baseline values ( $2.867 \pm 0.354$  pg/ml), as revealed by the Pre vs Post vs Follow Up comparison ( $p = 0.011$ ,  $\eta^2p = 0.703$ ,  $\omega^2p = 0.599$ ), and significant post-hoc differences were found showed (Pre vs Post:  $p = 0.170$ , and Post vs Follow Up:  $p = 0.161$ ).

**Conclusions:** Mid-term High altitude affects the Hypothalamus-hypophysis-gonads axis. This effect seemed to be more pronounced among Italians for progesterone and among Nepalese for testosterone.

### SC13 Outcomes of inflatable penile prosthesis in patients with or without virgin primary implant: A propensity score-matched comparison

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**Introduction:** Inflatable penile prosthesis (IPP) represents a mainstay for the treatment of erectile dysfunction (ED), showing excellent results when performed in selected patients. Although IPP might provide decreased outcomes in higher-risk populations, scarce data exist on the benefits and consequences of IPP placement in this surgical setting.

To compare outcomes of IPP in patients with or without virgin primary implantation.

**Materials and methods:** Data were obtained from our prospectively maintained institutional database. Propensity score matching was carried out to reduce the effect of inherent differences between groups. Clinical and surgical data were compared. Specifically, patients' and partners' outcomes were assessed by the International Index of Erectile Function (IIEF), Erectile Dysfunction Inventory of Treatment Satisfaction (EDITS) and Quality of Life and Sexuality with Penile Prosthesis (QoLSPP) questionnaires. Complications were graded using Clavien-Dindo classification.

**Results:** Of all 66 included patients, 24 with prior surgery for erectile dysfunction and Peyronie's disease (Group 1) could be matched with penile surgery-naïve patients (Group 2) in a 1:1 ratio.

Compared with reoperative cases, surgery-naïve patients had a shorter operative time [median (IQR): 85 (67–98) min vs 64 (50–76) min;  $p = 0.01$ ] and a lower complication rate (21% vs 12%;  $p = 0.02$ ). Overall, no differences were observed concerning sexual function recovery and device utilization (both  $p > 0.2$ ). However, men in Group 2 showed a tendency for a faster return to sexual activity ( $p = 0.01$ ).

Mean (SD) scores for questionnaires demonstrated high satisfaction and IPP efficacy in Groups 1 and 2: IIEF [20.0 (6.3) vs 20.3 (5.8);  $p = 0.6$ ], patient [74.8 (23.6) vs 75.1 (21.4);  $p = 0.5$ ] and partner EDITS [72.8 (24.8) vs 73.2 (23.1);  $p = 0.7$ ].

Similarly, QoLSPP showed favourable quality of life and sexuality: functional domain [3.8 (1.1) vs 4.0 (1.3);  $p = 0.3$ ], personal [3.9 (1.1) vs 4.1 (1.0);  $p = 0.5$ ], relational [4.0 (1.2) vs 3.9 (1.1);  $p = 0.3$ ] and social [3.9 (1.2) vs 4.1 (1.2);  $p = 0.4$ ].

**Conclusions:** In experienced hands, IPP placement offers high satisfaction to both patients and partners, also in the setting of non-virgin implant.

However, given the higher morbidity, it is mandatory to adequately inform and warn those patients about possible complications after surgery.

### SC14 Teratozoospermia is a poorly informative parameter for the evaluation of the infertile male: Hints from an academic high-volume andrological center

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**Introduction:** The clinical value of sperm normal morphology is not clearly established. We aimed to evaluate the relationship between normal morphology and the male fertility potential, using total motile sperm count as a proxy measure for it.

**Materials and methods:** We collected complete demographic and clinical data from 1118 primary infertile non-azoospermic men. At least two different semen analyses were requested for every participant. Semen analyses followed 2010 WHO reference criteria and were categorized according its cut-off values. TMSC was categorized into four groups of increasing severity:  $<1$  vs. 1–5 vs. 5–10 vs.  $>10$ . The relationship between normal morphology and fertility potential was graphically depicted. The diagnostic accuracy of teratozoospermia for the detection of very poor reproductive potential (i.e.  $TMSC < 1$ ) was estimated.

**Results:** Median sperm normal morphology and TMSC values were respectively 2% (interquartile range, IQR 1–10%) and 3 (0.4–11). WHO-defined teratozoospermia overall prevalence was 62%. The percentage of men with teratozoospermia increased from the least to the most severe TMSC group (52% vs 74%,  $p < 0.001$ ). Normal sperm morphology had a non-linear relationship with reproductive potential, with a modest linear rising slope only when normal morphology was below 10%. Using a 10% cut-off instead of 4% for normal morphology resulted in higher accuracy (0.62 vs 0.42) for identifying men with very poor reproductive potential, i.e.  $TMSC < 1$ .

**Conclusions:** Normal morphology values are pathological according to WHO in the vast majority of infertile men. However, they appear to be poorly informative in terms of reproductive potential. The WHO 4% threshold is poorly informative as well when it comes to infertile men with the most impaired reproductive potential.

### SC15 Effectiveness of a new drug (Camarouf 0.006%) in treatment of delayed ejaculation

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**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.

**Materials 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 penine 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 0,25 ml/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  $\Delta$  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  $\Delta$  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.

**Conclusions:** 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.

## SC16

### Antegrade versus retrograde common iliac artery revascularization and occurrence of erectile dysfunction

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**Introduction:** Aim of the study was to assess the effect of antegrade and retrograde common iliac artery (CIA) revascularization on erectile dysfunction (ED) using the validated International Index of Erectile Function (IIEF) questionnaire, on patients who were treated for chronic occlusions of the CIA.

**Materials and methods:** Clinical data of patients who were submitted either to antegrade endovascular CIA revascularization (group A) or to femoral-femoral crossover bypass with retrograde revascularization (group B) between 01/2010 and 12/2019 were retrospectively analyzed. Primary outcomes included the evaluation of ED using the IIEF questionnaire, before and after the operation, comparing both groups. Chi-square and T-tests and logistic regression analysis were used as appropriate. A P value  $< 0.05$  was considered statistically significant.

**Results:** Thirty-three patients underwent endovascular (14 patients, group A) or surgical treatment (19 patients, group B). Patients of group A were younger than those of group B ( $63.4 \pm 14.4$  years vs.  $71.8 \pm 17$  years respectively,  $P = 0.003$ ). Before the operation, no differences were recorded in the sexual function between the two groups. After the intervention, patients of group A performed significantly better than those of group B in terms of IIEF questionnaire ( $18 \pm 10.1$  versus  $12.1 \pm 14.8$ ,  $P = 0.01$ ).

Age significantly affected the occurrence of preoperative ED (OR 1.31,  $P = 0.02$ ), the preoperative results of the IIEF questionnaire (OR  $-0.39$ ,  $P < 0.001$ ) and the postoperative results of the IIEF questionnaire (OR  $-0.28$ ,  $P < 0.001$ ). Chronic Obstructive Pulmonary Disease (COPD) also affected the values of the preoperative and the postoperative IIEF questionnaire (OR 0.29,  $P = 0.03$  and OR 0.46,  $P = 0.001$ , respectively).

**Conclusions:** Patients who were submitted to endovascular antegrade revascularization of the CIA performed significantly better in terms of IIEF questionnaire than those who underwent retrograde revascularization. Older patients and patients affected by COPD were more likely to have sexual impairment both before and after the treatment and irrespectively of the groups.

## SC17

### The outcomes of the radial artery forearm free-flap phalloplasty in transgender men: A focus on surgical technique and flap vascular complications

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**Introduction:** Radial artery forearm free-flap (RAFFF) phalloplasty is considered by most authors as the gold standard technique for genital gender affirming surgery (GGAS). RAFFF surgical complications have been rarely investigated and the aim of this study and literature review is to analyze and focus on surgical technique and its 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 from the clinical records. Flap was prepared by the same surgical team in all cases. Flap baseline features and the incidence of postoperative vascular complications were reported. RAFFF relies on the radial artery and on several veins draining both superficial and deep system (cephalic, basilic, lateral flap vein and comitantes of the radial artery). As a standard procedure, 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 vein was performed. Then, the veins with the higher blood reflow were chosen to be sutured to either the accessory safena vein or the venae comitantes of the epigastric artery. Indeed, at least two or in some cases three vein sutures were performed depending by the flap requirement. A univariate analysis was conducted to identify predictive values for vascular complications (age, BMI, smoking habit, number of flap's veins). Statistical analysis was performed using STATA version 12.0 for Mac package.

**results:** From May 2016 to January 2020 a consecutive series of 25 transgender men underwent GGAS were enrolled in the present study. Median follow-up was 20 months. Age was 32. BMI was 24. 33.3% of patients were active smoker. Flap standard measures were: for phallus 13 cm base, 8.5 cm tip and 14 cm length; for urethra 4 cm width and 17 cm length. Tourniquet time was 105 minutes. Median flap veins were 2. A connection between the superficial and deep venous system into the cephalic vein was present in all cases. Overall, vascular flap complications occurred in 20% of cases. A complete flap loss due to acute arterial thrombosis was recorded in a single case (4%). In 8% of cases a limited ventro-proximal arterial ischemia was detected while in the remaining 8% of cases a venous ventral ischemia was reported. The univariate analysis evidenced as the only predictive values of vascular complications the number of flap veins ( $< 2$ ).

**Conclusions:** RAFFF represents a reliable option for total phallic construction (TPC) leading to satisfactory results in terms of flap survival. In order to optimize its surgical outcomes, the respect of venous vascular drainage should be recommended.

## SC18

### Functional and patient's reported outcomes after total glans resurfacing: Results from a retrospective analysis in a tertiary referral network

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**Introduction:** Functional outcomes and patients' reported outcomes (PRO's) on organ preserving surgery for penile benign or malignant lesions have been rarely investigated. Our study aims to report