SC92 Microsurgical pre-peritoneal lymphatic sparing varicocelectomy in adolescents: Results on a large series of patients

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Aim of the study: Controversy still exists regarding the most appropriate surgical management of varicocele in children and adolescents. Several options are today available ranging from sclerotherapy to laparoscopy, high and sub-inguinal open and microsurgical correction. We present our results after lymphatic sparing varicocelectomy with pre-peritoneal approach on a large series of patients.
Materials and methods: A retrospective analysis of patients who underwent pre-peritoneal lymphatic sparing varicocelectomy from 2010 onwards was performed. Surgical treatment was offered to children with grade II-III left sided varicocele. The procedure was performed under combined local and general anesthesia, without intubation. After surgical incision at mid-distance from the pubic tubercle and the iliac spine, muscles were split 2–3 cm above the internal inguinal ring and the spermatic vessels were identified and exposed. Using an operating microscope (10–15x), some lymphatic vessels were prepared and spared, and the spermatic pedicle was tied and divided. Clinical and ultrasonographic testicular characteristics, assessed at baseline and at 1- and 2-years follow-up, were considered for the analysis. Operation time (OT), post-operative complications and length of hospital stay (LOS) were also analyzed.
Results: Overall, 602 patients were included with a median age of 13.6 years (IQR: 11/15). Grade II and III varicocele were observed in 14 (2.4%) and 588 (97.6%) patients, respectively: 8 (1.3%) of these cases were relapses after previous varicocelectomy (3 after sclerotherapy; 5 after surgery); 2 (0.3%) were monorchid. At baseline, 103 (17.1%) patients complained of left scrotal pain. Mean OT was 23 ± 7 min. According to Clavien-Dindo classification system, no complications grade ≥ II were reported. Mean LOS was 4 ± 2 hours. At a mean follow-up of 27 ± 15 months, persistence/recurrence of varicocele was observed in 18 (2.9%) patients: 10 (55.5%) Grade I-II and 8 (44.5%) Grade III recurrences. Postoperative hydrocele occurred in 4 (0.6%) patients. No testicular atrophies were reported.
Discussion: According to our results, pre-peritoneal lymphatic sparing varicocelectomy is an effective treatment option in children and adolescents with varicocele, with minimal recurrences and a very low complications rate.

SC93 Prevalence and surgical management of pubic hypertrophy in hypospadias patients: Results from a high-volume surgeon

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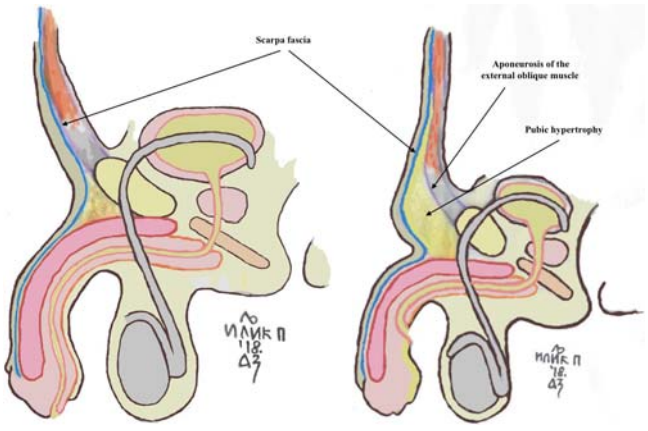
Aim of the study: Pubic hypertrophy (PH), defined as an abnormal and abundant round mass of fatty tissue located over the pubic symphysis that mimics the mons veneris, is frequently underestimated in hypospadias patients. We examined the prevalence of this condition, as well as the outcomes associated with its surgical treatment.
Materials and methods: Between Jan 2014 and Apr 2018, 266 patients were referred for hypospadias repair at our center. We treated all patients presenting PH with pubic lipectomy following precise steps. After penile degloving, we divided suspensory ligament releasing the skin and the Scarpa fascia from the body of the penis: such was made in order to get access to the suprapubic fat. The Scarpa fascia was carefully preserved in order to avoid any damage of the blood vessels and the nerves directed to the penile skin. The abundant fat was detached from the aponeurosis of the external oblique muscle and then resected. The procedure was completed with the fixation of the tunica albuginea to the periosteum of the symphysis pubis and with the fixation of the penile skin to the Buck's fascia (Fig). Urethroplasty was subsequently performed using tailored surgical techniques. Multivariable logistic regression (MLR) tested for predictors of PH. Finally, separate MLRs tested for predictors of fistula and any complications after pubic lipectomy.
Results: Of 266 hypospadias patients, 100 (37.6%) presented PH and underwent pubic lipectomy. Overall, we found that patients with PH more frequently had proximal hypospadias (44 vs. 7.8%), disorders of sex development (10 vs. 0.6%), cryptorchidism (12 vs. 2.4%), and moderate (30°-60°) or severe (>60°) penile curvature (33 vs. 4.2%). In MLR, the location of urethral meatus (proximal, Odds ratio [OR]: 10.1, $p < 0.001$) was the only significant predictor of PH. Finally, pubic lipectomy was not associated with increased risk of fistula (OR: 1.12, $p = 0.7$) or any complications (OR: 1.37, 95% CI: 0.64–2.88, $p = 0.4$) after multivariable adjustment.



Discussion: One out of 3 hypospadias patients, referred to our center, presented PH and received pubic lipectomy. This rate was higher in patients with proximal hypospadias suggesting a correlation between PH and severity of hypospadias. Noteworthy, pubic lipectomy was not associated with increased risk of fistula or any complications.

SC94 Vacuum physiotherapy after first stage buccal mucosa graft (BMG) urethroplasty in proximal hypospadias: A feasibility, safety and protocol compliance assessment study

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Aim of the study: Two-stage BMG urethroplasty represents the referral option in proximal hypospadias repair. However, after the first stage, approximately 8–13% of patients experience graft shrinkage, which prevents graft tubularization at the second stage and/or compromise the urinary stream. We aimed to assess the feasibility of vacuum physiotherapy meant to decrease graft contraction rate and hence successful tubularization.
Materials and methods: Between Jan 2014 and May 2018, we enrolled 59 two-stage BMG urethroplasties performed at our referral center. After first stage, we recommended five vacuum induced erections of the penis twice a day followed by a massage of the BMG with Bepanthen® ointment, every day till second stage surgery. Parents were instructed on how to use the vacuum device and were asked to continue it until the second stage surgery. An internal, self-