

recorded at baseline and again following a treatment or change in catheter management in order to detect treatment response or symptom progression.

Results: A total of 20 patients were included with the following conditions: spinal tumours 2, Multiple sclerosis 5, spina bifida 5, transverse myelitis 1, cauda equina 1 & spinal cord injury 6. The mean SF score at initial assessment was 2.66 and following treatment was 2.29. A total of 17 patients showed improved scores, 2 showed no changes and only 1 had a disimprovement on repeat scoring. The mean difference in scoring was 0.38 (0–2.75). The greatest change was noted in a spinal injury patient fitted with a different long term catheter and a cauda equina patient who initiated intermittent catheterisation recorded an increased score.

Conclusion: The SF Qualiveen questionnaire is a useful adjunct when monitoring symptoms in neurogenic bladder patients and is now routinely used in our unit.²

References

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Evaluation of an Ex-Vivo Model of Catheter-Induced Trauma of the Paediatric Urethra using Porcine Tissue

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Introduction: We proposed a juvenile porcine model to mechanically and pathologically evaluate catheter balloon inflation pressure and diametric strain thresholds associated with risk of urethral injury in paediatric patients.

Methods: Serial inflations of paediatric catheter balloons were performed in air as representative of intra-vesical inflation pressures. Juvenile porcine urethras (n = 13, age 4–12 weeks) were harvested from an abattoir and calibrated for size. 9 cm segments of urethra were mounted over 8 Fr and 10 Fr catheters on a custom-designed experimental apparatus. The catheter balloon was inflated in the post-prostatic urethra and pressure and diametric changes were recorded via a pressure transducer and video extensometer. Scanning electron microscopy (SEM) and histological analysis were performed on control and balloon-inflation segments.

Results: Typical balloon inflation pressures in air using paediatric catheters were ≥ 300 kPa. Mean resistance to balloon expansion of 8 and 12 week-old urethral samples was 64 kPa and 42.21 kPa respectively. Diametric strain $\leq 20\%$ was observed using 3 ml and 5 ml balloon inflation volumes in 8 Fr and 10 Fr catheters respectively. SEM and histological analysis demonstrated early tissue injury of the porcine urethras following intra-urethral balloon inflation.

Conclusions: Juvenile porcine urethras produce pressure differentials significantly lower than adult porcine/human models. Knowledge of such pressure differentials are crucial for developing mechanisms to safeguard against catheter-related injury in paediatric patients.

Immediate penile prosthesis for the management of ischemic priapism

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Introduction: Ischaemic priapism is the commonest form of priapism. Prolonged ischaemia is associated with smooth muscle necrosis and cavernosal fibrosis. Acute prosthesis implantation aims to treat the priapism and the inevitable erectile dysfunction.

Methods: A review was carried out of all patients who underwent surgical intervention for priapism between 2016 and 2019. Data was collected using theatre logbooks and patient records. This study included all patients who underwent insertion of a penile prosthesis for ischaemic priapism during their initial presentation.

Results: In total, six patients underwent insertion of a malleable penile prosthesis during their initial presentation. All six were delayed presentations with a mean duration of onset of 41 hours. Five presented with drug-induced priapism and the sixth, with priapism secondary to malignancy. The patients were aged between 37 and 63 and self-reported good erectile function prior to admission. Prior to prosthesis insertion, other treatments trialled without success included aspiration, intracavernosal phenylephrine and shunt procedures. Corporal biopsies were taken to document smooth muscle necrosis and ischaemic priapism. Two patients have proceeded to insertion of a three piece inflatable prosthesis. Two other patients are awaiting this surgery. The final two declined further surgery. All six patients are sexually active. There have been no complications to date as a result of their surgeries.

Conclusion: Ischaemic priapism is a rare disease and management is dependent on early presentation. In patients who present late, conservative management is typically unsuccessful. In these patients early referral to a subspecialist centre for implantation of a penile prosthesis should be considered in order to treat both the priapism and optimise subsequent erectile function.

Patient reported outcomes in reconstructive penile surgery for Peyronie's disease

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Introduction: Reconstructive penile surgery can have significant benefits to men with conditions leading to penile curvature including Peyronie's disease. Oftentimes these men have voiding or sexual sequelae from their diseases and can be markedly affected by them. Similarly, the interventions offered can also have significant impact on their lives, though these are seldom reported. Patient reported outcome measures (PROM) are a method of recording the outcomes that matter to patients and can be applied to surgical procedures. We aimed to review the patient outcomes from our cohort of penile reconstructive patients.

Methods: Patients that underwent a penile curvature surgery at our institution between January 2017 and December 2018 were invited to complete previously-published PROM survey. Results were collected and compared with surgical techniques used.

Results: 24 patients underwent surgical procedures (15 Nesbitt procedures, 6 16-dot procedures, 2 Leus procedures and 1 Yachia

procedure). The mean age for surgery was 54 and mean duration of symptoms was 19 months. Most patients reported that their postoperative condition was better than before surgery. There has been a general improvement in ability to perform sexual intercourse, with a decrease in pain experienced. There was no significant difference between PROM for differing surgical techniques.

Conclusion: Patient reported outcomes allow us to evaluate the results of surgery from the patient's perspective. Reconstructive surgery for penile curvature demonstrates consistent improvements in PROMs, thus reinforcing its role in the treatment of this disease.

Complications and outcomes following injection of foreign material into male external genitalia for augmentation

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Introduction: Injection of exogenous material into the penis and scrotum has been performed by both individuals and physicians for augmentation purposes. There is often a delay in presentation, with complications ranging from cosmetic dissatisfaction to penile necrosis and genital lymphoedema. This study reports the complications and outcomes from a large single centre.

Patients and Methods: A retrospective review of all cases presenting with foreign substance injection into the genitalia, between 2006 and 2018 was performed. Data included patient demographics, type of substance, injection site, symptoms, sexual function, management and complications.

Results: A total of 30 patients were identified with median age 34 years (range 22–59) at presentation. The time between injection and presentation ranged from 1 day to 22 years. Presenting features included penile deformity, pain, phimosis, painful intercourse and necrosis.

Injected substances included silicone (n = 14), liquid paraffin (n = 6), Vaseline (n = 5), baby oil (n = 4), autologous fat (n = 1). Common injection sites included penile shaft (93.1%), foreskin (34.5%), scrotum (27.6%), suprapubic area (6.9%), frenulum (3.4%). Surgical intervention was required in 27 cases, 16 underwent local excision and primary

closure, 7 underwent circumcision and 4 required skin grafting. Sixteen patients required additional surgical procedures. Two patients required emergency debridement, with one developing penile necrosis.

Conclusions: The practice of injecting foreign materials into the genitalia is becoming more common. Complications can be serious, with life-changing functional and cosmetic consequences. The commonest complication is lymphoedema with granulomatous reaction. Surgical intervention is often required with poor cosmetic outcomes. Increased patient education and awareness is needed.

Starting a Urethroplasty Service: Initial results from a UK centre

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Introduction: Stricture disease remains uncommon with an incidence of 0.9%. Most cases are initially managed endoscopically. Urethral reconstruction remains a specialised field and is typically concentrated in specialised centres. In 2018 a urethral centre was established in Whiston Hospital, Merseyside to cater for local demand.

Methods: Sixteen patients who underwent urethral reconstruction in the first 18 months of the unit being established were included. Source of referral, preoperative and postoperative symptom scores, length of graft and nature of procedure and complication rates were recorded.

Results: Three patients were referred from the private sector and two from other Hospitals. The mean age of patient was 47 years. Four were BXO related and 3 were catheter related. Mean preoperative IPSS scores were 16 and 4 respectively with postoperative scores falling to 6 and 2. Mean Buccal graft size was 4.5 cm. A total of 21st stage, 6 ventral onlay, 3 asopa, 2 dorsal onlay, 1 combined procedure & 2 division of penoscrotal webs were performed. 1 wound infection was noted post op and 1 patient continued to intermittently self dilate. No oral wound or erectile problems were reported.

Conclusion: Following the establishment of a dedicated unit the referral base has grown with promising results to date. Access to theatre remains a challenge and revised data will include 2nd stage procedures.