

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