Round up

Vesicovaginal fistula (VVF) severely restricts the quality of life, while hysterectomy is one of the most common causes of VVF formation. The optimal time duration for repair is not well defined but most urologists would wait for 2–3 months before repair. As a result, the patient’s life remains miserable during this waiting period. Giusti et al. reported their experience of successfully treating 16 women with posthysterectomy VVF with transperitoneal extravesical laparoscopic approach (100% success). Instead of tissue interposition between the sutured urinary bladder and vagina, they report the use of commercially available absorbable fibrin sealant patch to save operative time. All the VVFs were secondary to abdominal radical hysterectomy and the fistula had supratrigonal location. The mean time between hysterectomy and VVF correction was 9 days (range 4–17). Their data support early repair in simple posthysterectomy VVFs. Similar results were also reported by Xiong et al. involving 18 women including some with complex fistulas.

5-alpha reductase inhibitors (5ARIs) are widely used for the treatment of benign prostate enlargement (BPE). This drug was also evaluated as a chemopreventive agent for cancer prostate. However, a study showed that its use was associated with higher risk of detection of high-grade cancer prostate. In a population-based study involving a cohort of 214,272 men over a 19-year observation period, Wallner et al. compared the risk of mortality among men treated for BPE with 5ARI to those men treated with alpha-blockers alone in community practice settings. With 543,523 person-years of follow-up reported, the authors recorded 35,266 deaths during the study period, of which 18.9% were 5ARI users, while 20.4% were on alpha-blockers alone. After adjusting for age, medication initiation year, race, region, prior alpha-blocker intake history, Charlson score, and comorbidities, the authors found that 5ARI use was not associated with an increased risk of mortality when compared to alpha-blocker use (adjusted hazard ratio: 0.64, 95% confidence interval: 0.62, 0.66). This study reassures that the use of 5ARI is safe.

Patients with muscle-invasive bladder cancer are often treated by radical cystectomy. The two common methods for urinary diversion include ileal conduit and orthotopic neobladder. Apart from the other morbidities associated with these procedures, urinary tract infections (UTIs) are one of the most common problems encountered in the postoperative period. Mano et al. compared the incidence rate of UTIs and associated pathogens between patients receiving either ileal conduit or orthotopic neobladder urinary diversion following radical cystectomy. The authors reviewed the records of 179 patients treated between 2006 and 2011 and collected data regarding postoperative UTI. The authors also identified the preoperative predictors for developing UTI using the Cox regression analysis. During the study duration, 130 patients underwent ileal conduit, while 49 had orthotopic neobladder. Within the first 3–3 months, 29% patients with neobladder developed UTI as compared to 8% patients with ileal conduit ($P = 0.001$). The rates of UTI did not differ in subsequent follow-up. Diversion type was not significantly associated with the occurrence of UTI on the multivariate analysis after adjusting for age, Charlson comorbidity index score, and presence of diabetes mellitus.

Extracorporeal shock wave lithotripsy (SWL) is an important treatment modality for managing pediatric renal stones. Onal et al. and Dogan et al. in 2013 and 2015, respectively, proposed nomograms for predicting the success rate of SWL in individuals <18 years of age. These nomograms predict the successful outcome based on parameters such as age, stone size, history of stone treatment, gender, stone location, and stone number. Yanaral et al., in a retrospective analysis, analyzed the data of 219 children aged <18 years. The mean age of the study population was 82.7 months. The authors found that both Onal et al. and Dogan et al. nomograms were independent predictors of stone-free rate following SWL in children. Although both the nomograms predicted the outcomes of SWL, the authors felt that there were limitations in both the nomograms and a better nomogram was needed. They suggested that addition of parameters such as stone density, renal abnormalities, degree of obstruction, and setting of lithotripters can further improve the predictive power of these nomograms.

Sactral neuromodulation (SNM) using an implanted device is one of the treatment options for management of conditions such as overactive bladder. Traditionally, magnetic resonance imaging (MRI) is contraindicated in individuals with devices, especially if the device is implanted near the area of imaging. Patients with InterStimTM II device can only undergo 1.5 Tesla head MRI using a radiofrequency transmit-receive head coil, while MRI for other body parts is not recommended by the manufacturer. The problems include heating of the device during MRI, shock-like stimulation, permanent damage to device, change in device settings, and implant movement. Due to these concerns, radiologists usually refuse to perform MRI on such
individuals. The literature documenting the safety of MRI in individuals with SNM device is scarce. Guzman-Negron et al. prospectively evaluated the safety of performing 1.5 Tesla MRI of the lumbosacral spine in 11 participants. They reported no significant adverse events in patients and the therapeutic efficacy of SNM remained unchanged 1 month after imaging.

Urethral stricture recurrence is not uncommon after urethroplasty and is often managed by urethral dilatation (UD), direct vision internal urethrotomy (DVIU), or repeat urethroplasty. Sukumar et al. share their experience of treating 53 men who developed stricture recurrence after bulbar urethroplasty and were managed by either UD or DVIU. They compared the outcomes between UD and DVIU. Furthermore, they evaluated the results based on the type of initial urethroplasty (excision and primary anastomosis [EPA] versus substitution urethroplasty). At a median follow-up of 5 months, the success after UD was only 10% as compared to the success rate of 49% with DVIU (P < 0.001). The results after DVIU were better in men who had undergone substitution urethroplasty (53%) as compared to men who had undergone EPA (13%; P = 0.005). The authors speculate that this observation could be because of the different mechanisms of recurrence for EPA (ischemic) versus substitution urethroplasty (nonischemic).

Apul Goel*
Department of Urology, King George’s Medical University,
Lucknow, Uttar Pradesh, India
E-mail: drapul.goel@gmail.com

REFERENCES

1. Giusti G, Lucci Chiarissi M, Abate D, De Vita G, Angioni S, De Lisa A. Early repair of post-hysterectomy vesicovaginal fistulae through a laparoscopic transperitoneal extravesical approach. Experience of a single center. Urology 2018. pii: S0090-4295(18)30539-9.
2. Xiong Y, Tang Y, Huang F, Liu L, Zhang X. Transperitoneal laparoscopic repair of vesicovaginal fistula with supratrigonal fistula: Comparison with open transperitoneal technique. Int Urogynecol J 2016;27:1415-22.
3. McVary KT, Roehrborn CG, Avins AL, Barry MJ, Bruskewitz RC, Donnell RF, et al. Update on AUA guideline on the management of benign prostatic hyperplasia. J Urol 2011;185:1793-803.
4. Andriole GL, Bostwick DG, Brawley OW, Gomella LG, Marberger M, Montorsi F, et al. Effect of dutasteride on the risk of prostate cancer. N Engl J Med 2010;362:1192-202.
5. Thompson IM, Goodman PJ, Tangen CM, Lucia MS, Miller GJ, Ford LG, et al. The influence of finasteride on the development of prostate cancer. N Engl J Med 2003;349:215-24.
6. Azoulay L, Eberg M, Benayoun S, Pollak M. 5α-reductase inhibitors and the risk of cancer-related mortality in men with prostate cancer. JAMA Oncol 2015;1:314-20.
7. Murtola TJ, Karppa EK, Taari K, Talala K, Tammela TL, Auvinen A. 5-alpha reductase inhibitor use and prostate cancer survival in the Finnish prostate cancer screening trial. Int J Cancer 2016;138:2820-8.
8. Preston MA, Wilson KM, Markst SC, Ge R, Morash C, Stampfer MJ, et al. 5α-reductase inhibitors and risk of high-grade or lethal prostate cancer. JAMA Intern Med 2014;174:1301-7.
9. Wallner LP, DiBello JR, Li BH, Van Den Eeden SK, Weinmann S, Ritzwoller DP, et al. The use of 5-alpha reductase inhibitors to manage benign prostatic hyperplasia and the risk of all-cause mortality. Urology 2018. pii: S0090-4295(18)30553-3.
10. Mano R, Goldberg H, Stabholz Y, Hazan D, Margel D, Kedar D, et al. Urinary tract infections after urinary diversion-different occurrence patterns in patients with ileal conduit and orthotopic neobladder. Urology 2018;116:87-92.
11. Onal B, Tansu N, Demirkesen O, Yalcin V, Huang L, Nguyen HT, et al. Nomogram and scoring system for predicting stone-free status after extracorporeal shock wave lithotripsy in children with urolithiasis. BJU Int 2013;111:344-52.
12. Dogan HS, Altan M, Citemak B, Bozaci AC, Karabulut E, Tekgul S, et al. A new nomogram for prediction of outcome of pediatric shock-wave lithotripsy. J Pediatr Urol 2015;11:84.e1-6.
13. Yanaral F, Ozgor F, Savun M, Agbas A, Akbulut F, Sarilar O. Shock-wave lithotripsy for pediatric patients: Which nomogram can better predict postoperative outcomes? Urology 2018. pii: S0090-4295(18)30303-0.
14. Medtronic Inc. MRI guidelines for InterStim Therapy Neurostimulation Systems. Available from: http://www.mriquestions.com/uploads/3/4/5/7/34572113/interstim_contrib_214172.pdf. [Last accessed on 2018 Jan 23].
15. Guzman-Negron JM, Pizarro-Berdichevsky J, Gill BC, Goldman HB. Can lumbosacral magnetic resonance imaging be performed safely in patients with a sacral neuromodulation device? An in vivo prospective study. J Urol 2018. pii: S0022-5347(18)43272-7.
16. Sukumar S, Elliott SP, Myers JB, Voelzke BB, Smith TG, Carolan AM, et al. Multi-institutional outcomes of endoscopic management of stricture recurrence after bulbar urethroplasty. J Urol 2018. pii: S0022-5347(18)30884-4.