## ACCEPTED MANUSCRIPT

## **Adolescent Urology**

## Rosalia Misseri

The authors of the articles in this edition's section on Adolescent Urology address some of the most controversial topics and conditions encountered in our specialty. While often encountered earlier in childhood, they become increasingly more important with age. In an attempt to elucidate the risks of malignancy in people with spina bifida, Dr. Rove and colleagues reviewed the English language literature to help determine the risks of bladder cancer. Based on a systematic review of several small series, the authors conclude that people with myelomeningocele may develop highly aggressive forms of bladder cancer and that overall survivals are similar regardless of augmentation status. This highlights our responsibility to educate **all** individuals with myelomeningocele of an increased risk of bladder cancer.

*Dr. Djordjevic and colleagues* from Serbia address the surgical management and challenges of genital reconstruction for transgendered individuals. This review article was preceded by a review article focusing on non-surgical aspect of care by *Conard* entitled "Supporting and caring for transgender and gender nonconforming youth in the urology practice" in the June edition. While the current article highlights the surgical aspect of care for transgender children and adolescents, both manuscripts highlight the importance of a multidisciplinary approach that includes both surgical and non-surgical specialists such as psychologists. The authors suggest that successful outcomes involve surgical skill as well as an understanding of the patient's desired body image. Several reconstructive techniques are described and are useful for initial discussions that may occur with our transgendered youth.

Finally, in our continued quest to optimize the treatment of adolescent boys with varicoceles, an article by Locke and colleagues critically assesses the outcomes of surgical and radiological therapies available by evaluating randomized controlled trials available in the literature. In a separate manuscript, Esposito and colleagues present a 23-year experience with varicocele repair. Based on their review that includes boys who have had laparoscopic Palomo varicocelectomies with and without artery sparing, they conclude that laparoscopic Palomo lymphatic sparing varicocelectomy should be considered the standard of care for the treatment of pediatric patients with varicocele. Their surgical success is attributed to standardization of the surgical technique leading to very low rates varicocele persistence/recurrence (1.3% in Palomo; 10% in artery spring Palomo). Since the introduction of intradartoic/intratesticular isosulfan blue injection no post-operative hydroceles were reported. While the study addresses varicocele recurrence/persistence and hydrocele formation, it does not address the question at the core of the systematic review by Locke and colleagues, i.e., the long-term effects of varicocele and varicocelectomy on fertility. Using well-defined methodology, the authors found intermediate and low level of evidence to support intervention for varicoceles in children and adolescents in order to improve testicular volume and sperm concentration. They found no evidence that interventions lead to improvement of other semen parameters. As the long-term effects of fertility remain poorly reported and unknown, a multi-center randomized trial with long-term follow up is suggested to help identify at adolescents at risk for infertility.

**1.** Conard, L.E. Supporting and caring for transgender and gender nonconforming youth in the urology practice. J Ped Urol. 2017; 13: 300–304.

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