Nature Reviews Urology **10**, 618 (2013); published online 15 October 2013; doi:10.1038/nrurol.2013.241; doi:10.1038/nrurol.2013.242; doi:10.1038/nrurol.2013.243; doi:10.1038/nrurol.2013.244

IN BRIEF

PAEDIATRIC UROLOGY

Increased incidence of hypospadias in Sweden

The number of boys diagnosed with hypospadias increased from 4.5 per 1,000 between 1973 and 1990 to 9 per 1,000 in the period 1990–2009, according to the results of a nationwide population-based study from Sweden. Data collected from 1,948,591 boys revealed that the incidence of both mild and severe hypospadias increased during this time, and risk factors for hypospadias included being born small for gestational age (OR 4.34), being a twin (OR 1.41), and being the result *in vitro* fertilization (OR 1.15).

Original article Nordenvall, A. S. et al. A population-based nationwide study of hypospadias in Sweden, 1973–2009: incidence and risk factors. J. Urol. doi:10.1016/j.juro.2013.09.058

O PAEDIATRIC UROLOGY

Utilization of minimally invasive nephrectomy in children

Further to previous findings in adults, increased adoption of minimally invasive techniques for nephrectomy has now also been demonstrated in children. New analysis of the Nationwide Inpatient Sample demonstrates that a total of 27,615 children underwent nephrectomy in the USA between 1998 and 2010, and although the annual nephrectomy rate remained stable during this time, the use of minimally invasive techniques increased from 1.1% to 11.6%. Children with benign pathology were more likely to undergo minimally invasive nephrectomy than those with cancer.

Original article Sammon, J. et al. Pediatric nephrectomy: incidence, indications and utilization of minimally invasive techniques. J. Urol. doi:10.1016/j.juro.2013.09.058

O PAEDIATRIC UROLOGY

Preventing renal damage in children with spinal dysraphism

Starting clean intermittent catheterization (CIC) early does not provide any benefits with regard to renal abnormalities on dimercaptosuccinic acid (DMSA) scan in children with spinal dysraphism. Woo *et al.* retrospectively reviewed 100 children with spinal defects; 17 underwent CIC from birth and 83 started CIC at a median age of 5 years. Multivariate analysis demonstrated that initiation of CIC at birth was significantly associated with an increased risk of renal cortical loss on DMSA scan, along with a history of vesicoureteral reflux or hydronephrosis.

Original article Woo, J. *et al.* Early clean intermittent catheterization may not prevent dimercaptosuccinic acid renal scan abnormalities in children with spinal dysraphism. *J. Pediatr. Urol.* doi:10.1016/j.jpurol.2013.09.001

O PAEDIATRIC UROLOGY

Adult markers for ITGCN cannot be used in children

Intratubular germ cell neoplasia (ITGCN) is a precursor lesion for testicular germ cell cancer, and new research suggests that the immunohistochemical markers used to detect ITGCN in adults—including placental-like alkaline phosphatase (PLAP) and c-Kit—are not suitable for use in children. Testicular biopsies from 170 boys who underwent surgery for cryptorchidism between the ages of 1 month and 15 years were stained for adult ITGCN markers. Positive staining was common in this age group, suggesting that these markers are not predictive for ITGCN in children.

Original article Kvist, K. *et al.* Adult immunohistochemical markers fail to detect intratubular germ cell neoplasia in prepubertal boys with cryptorchidism. *J. Urol.* doi:10.1016/j.juro.2013.10.001