



PEDIATRIC SURGERY Update © **Vol. 36 No. 01 JANUARY 2011**

Laparoscopic Rectopexy

Full-thickness rectal prolapse is a relatively common and distressing condition in children that fortunately is usually self-limiting in the life of the affected child and family. Peak incidence is between one and three years of age. Medical management improves more than 80% of all cases of rectal prolapse. Patients are managed for the underlying cause of the prolapse such as chronic constipation or acute diarrhea, while cystic fibrosis is rule-out. Failed medical therapy and recurrent prolapse will be managed with surgery. Before surgical intervention the rectum should be evaluated with imaging studies (Barium Enema) and flexible endoscopy. Therapeutic surgical procedures include submucosal injection of sclerosant, Thiersch cerclage, open abdominal rectopexy with or without sigmoid resection and perineal rectopexy. Rectopexy alone for megarectum or megasigmoid is not appropriate and will eventually need resection of the dilated bowel. With the use of minimally invasive techniques, laparoscopic suture rectopexy namely, full posterior mobilization and fixation to the sacrum, has emerged as an alternative surgical management for recurrent rectal prolapse in children. No preoperative bowel preparation is required while the procedure can be done ambulatory with a low morbidity, low recurrence rate and excellent cosmetic results. Laparoscopic rectopexy has also been found to improve constipation and fecal incontinence.

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Renal Leiomyoma

Leiomyomas are characterized as benign mesenchymal tumor that arise from smooth

muscle cells. Their most common location is the uterus and gastrointestinal tract, though they can rarely arise anywhere smooth muscle cells exist. Wilms tumor is still the most common renal tumor in children. Renal leiomyoma is a very rarely found in children. The leiomyoma of kidney can arise from the renal capsule (most common site), renal pelvis and calyces, or the renal cortical vasculature. Most cases of renal leiomyoma are found in adults at a median age of 40 years with female predominance. In children the rare cases have been found incidentally. When symptomatic the tumor has enlarged significantly causing pain, a palpable mass and hematuria. Alport syndrome has been associated with diffuse leiomyomatosis, including the genitourinary tract. Diagnostic studies include abdominal US (solid mass) and CT-Scan (well circumscribed homogenous enhanced mass). When very large they are undistinguishable from nephroblastomas. Managements consist of total nephrectomy. An association between Epstein-Barr virus and smooth muscle tumors such as renal leiomyoma in immunocompromised patients has been recognized recently.

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Acquired Undescended Testis

Undescended testes (UT) are recently categorized into congenital and acquired forms. In the congenital form the child is born with an undescended testis, while the acquired form is characterized for later development in life of cryptorchidism. The acquired form of undescended testes comprises the high rate of orchidopexies performed later in life in children. It is a condition in which a previously fully descended testis can no longer be manipulated into a stable scrotal position. Acquired UT are mostly situated in a superficial inguinal pouch, of normal size, with a normal attachment of the gubernaculum, and in half of the cases associated with an open processus vaginalis. They are not associated with epididymal deformities or abnormal attachment of the gubernaculum. Acquired UT can be secondary to failure of natural elongation of cord structures in proportion to body growth due to complete disappearance of the processus vaginalis. In contrast the congenital variety of UT is proximal to the external spermatic ring (intra-canalicular), a complete hernial sac is present, and is associated with epididymal deformities and abnormal attachment of the gubernaculum. Acquired UT has also been reported in children with cerebral palsy due to spasticity of the cremasteric muscle. Both forms of UT should be managed by orchiopexy to avoid the adverse effects on germ cell development and fertility potential. For congenital UT orchiopexy is

recommended at 6-12 months of age. Postoperative results are better for the acquired form compared with the congenital variety.

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