



PEDIATRIC SURGERY Update*

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Earlobes Keloids

Keloids and hypertrophied scars are benign fibroproliferative cosmetic deformities of a wound original border after injury or trauma. Keloids are the result of excessive collagen deposition in genetically and/or environmental predisposed populations. Almost 70% of keloids or hypertrophied scars occur in children. Keloids occur in dark skin individuals (African American), are associated with familiar history and related to hormonal changes caused by puberty. The earlobe is the most common location for keloid development after injury caused by piercing. Incidence of earlobe keloid development after ear piercing is around 2.5%. During development and afterward keloids causes pain, pruritus, tenderness, and cosmetic disfigurement impairing the quality of life of the patient. The child with a keloid is affected socially and psychologically. Earlobe keloids affect both genders equally after ear piercing. The recurrence rate after simply excising keloids is as high as 80%, the reason for using other adjuvant therapies such as corticosteroid injection (Kenalog), cryotherapy, cryosurgery, laser therapy and radiotherapy. The majority of these treatment managements are associated with frequent recurrences. The median time for recurrence after excision is six months, meaning that long follow-up is needed to identify those cases that will eventually recur. Intralesional corticosteroid placement is considered a main stay of therapy of keloids owing to the ease of use and high degree of endurance. Mechanisms of action of steroids include suppression of inflammation, promotion of collagen degeneration and inhibition of further collagen production. Side effects of intralesional steroid therapy include cutaneous atrophy, skin hypopigmentation and pain associated with the injection. Radiotherapy, though expensive, claims local control after excision in more than 80% of patients. Radiation reduces recurrence after excision by reducing cellular proliferation. The preferred approach to pediatric earlobe keloids is excision with closure using absorbable sutures and concomitant steroid injection.

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CBD Dilatation After Cholecystectomy

With the current use of US for different intraabdominal symptoms physician has found that common bile duct dilatation (CBD) can occur after a cholecystectomy. Whether this finding is found in patients who are asymptomatic or with symptoms it brings the difficult situation if the dilatation found incidentally is pathological or not. This brings further imaging studies to elucidate this controversy such as MRCP or even ERCP in these patients. Studies that are either expensive or invasive. It is believed this dilatation of the CBD in post cholecystectomy patients is a physiologic response caused after the reservoir ability of the gallbladder with its removal is lost. Also, an increase in the intraluminal pressure of the CBD can be an etiological factor. Many cross-sectional studies reveal that the CBD diameter increases in gallbladder resected patients compared with normal people. The dilatation of the CBD can be more than 6 mm observed in 80% in the proximal part and 60% in the distal part of the CBD. This dilatation after cholecystectomy seems to increase with the increase in age of the patient. Eastern populations have shown that the CBD dilatation is frequently accompanied by ampullary diverticulum, biliary sludge or abnormal pancreatico-biliary anatomy. Most cases of CBD dilatation after cholecystectomy are asymptomatic and have normal liver function tests and total bilirubin. The patient sex, body weight and height, diagnosis and bile duct diameters do not have an effect on the postoperative common bile duct dilatation. A CBD dilatation within 10 mm in asymptomatic adult patients after cholecystectomy is permissible, can be regarded as normal physiologic changes and does not warrant further studies. This data has not been elucidated in post-cholecystectomy children yet. In children the normal diameter of the CBD depends on the age of the patient. Should the child present with an asymptomatic dilatation of the CBD an MRCP should be performed.

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Urogenital Sinus

Urogenital sinus (UGS) refers to persistent anatomic defect where there is a normally placed anus, but the bladder and vagina share a common channel orifice. The vagina and urethra might join anywhere along a spectrum from the bladder neck, with a common channel (high confluence) to those that join near the perineum with a short common UGS (low confluence). Urogenital sinus is a common feature of a variety of congenital anomalies such as congenital adrenal hyperplasia (most common), isolated malformation unrelated to masculinization or rectal malformation and persistence of a cloacal malformation. The vast majority of children with UGS abnormalities have genital ambiguity and are thus identified as neonates. Hydrocolpus is relatively common and affected infants may demonstrate other syndromic features. This ambiguity is most commonly secondary to congenital adrenal hyperplasia (CAH). The virilization of children with CAH cause clitoral enlargement (clitoromegaly) and UGS. The larger the clitoris the longer the UGS confluence. In order to provide management, the child with a UGS need to undergo specific and detail imaging of the anatomy of the defect. This includes pelvic US, MRI (including evaluation of spinal cord anomalies), CT-Scan and VCUG. An endoscopy of the sinus tract is imperative before embarking on repair. The goal of surgical correction of the UGS is the creation of separate openings in the vulva for the urethra and vagina with preservation of the function of both organs. The relationship of the vagina to the bladder neck is the most critical determining factor in the type of vaginoplasty to be performed. Using a perineal approach either posterior vaginoplasty for short confluence defects is utilized or partial/total urogenital mobilization for high confluence defects is required to achieve such goals. Timing of surgery is controversial. Cases with recurrent urinary tract infection and significant Hydrocolpus should be reconstructed before the age of one year. Complications include urinary incontinence, vaginal stenosis and fistula between the urethra and the vagina. Fortunately, these complications occur infrequently.

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***Edited by: Humberto Lugo-Vicente, MD, FACS, FAAP**
 Professor of Pediatric Surgery, University of Puerto Rico - School of Medicine,

**Rio Piedras, Puerto Rico. Director - Pediatric Surgery, San Jorge Children's & Woman
Hospital.**

**Address: P.O. Box 10426, Caparra Heights Station, San Juan, Puerto Rico USA 00922-
0426.**

Tel (787) 340-1868 E-mail: *titolugo@coqui.net*

Internet: <http://home.coqui.net/titolugo>

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