

# PEDIATRIC SURGERY UPDATE © Vol 09 No 04 OCTOBER 1997

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## **Perforated Appendicitis**

Perforated appendicitis continues to occur at a similar rate than twenty years ago, although there are scattered reports that children with symptoms of appendicitis evaluated in managed care systems that have shown a tendency to lower perforation rates. Morbidity and longer hospital stays takes its toll when this vestigial organ inflames and ruptures. Each stage in appendicitis has a unique form of management. The standard goal of therapy for children perforated with appendicitis is: aggressive hydration, immediate appendectomy, systemic antibiotic therapy, copious peritoneal saline irrigation, wound irrigation, and primary closure in the best hands. Open peritoneal lavage has been found superior to intraperitoneal tube drainage or closed postoperative peritoneal lavage in the management of perforated appendicitis in children. Some authors have found that the technique of peritoneal lavage rather than the disease process itself may be responsible for some postoperative complications such as small bowel adhesions and obstruction. Leaving the wound open brings painful local care, augment absence from school, increases the hospital stay, and is not necessary in most children. Subcuticular incisional closure results in minimal wound care and excellent cosmetic results. Lavage of the surgical wound with physiologic serum is an effective, safe and inexpensive method to prevent infection of the wound following appendectomy.

# **Nephrectomy in Neuroblastoma**

Removal of a kidney involved with neuroblastoma (NB) should be done for radiographic and intraoperative evidence of gross kidney involvement. A recent study group from Japan for advanced NB (Stage III and IV) evaluated the preservation of the ipsilateral kidney at surgery on subsequent length of survival showing a better survival in the group of children whose kidney was preserved, although they confess bias in the selection of patients since the decision (for either nephrectomy or kidney preservation) was not randomized. Kidney invasion in NB is by direct penetration through the capsule or by extension along blood vessels. For curability, stage III needs pathological (histological) evidence of gross tumor removal to be effective therapy. When

the tumor is adhere to vital structures you should not risk injury to nerves, major blood vessels or organs (this includes the kidney) by performing radical excision since there is no improvement in survival. Furthermore unilateral nephrectomy could bring a higher risk of chemotherapyinduced renal impairment. The main reasons to avoid nephrectomy in cases of advanced NB are that survival is not improved, and morbidity/mortality is increased.

### **Preauricular Sinus**

Preauricular sinus is a common congenital condition that does not always cause symptoms. It arises from the anterior aspect of the helix, not branchial cleft remnant related. The sinus passes through the skin anteriorly to end in a racemose group of pre-auricular cysts. Its origin can be traced to imperfect fusion of the six tubercles that form the pinna. Symptoms occur after an episode of infection. Recurrent infection may lead to development of a pre-auricular ulcer. Complete excision of the sinus tract and its associated cyst down to the temporalis fascia effect a cure. Surgery should be avoided during incipient infection. Excision under general anesthesia with the use of an extended incision with removal of all epithelial component down to the temporalis fascia will be usually needed. Massaging the sinus may avoid longterm occlusion of its lumen with its attendant possibility of infection.

#### **PRAPS**

June 1997 marked the long awaited creation of the Puerto Rico Association of Pediatric Surgeons (PRAPS). 'Pediatric Surgery Update' becomes the official publication of PRAPS.

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