



PEDIATRIC SURGERY Update © **Vol. 30 No. 04 APRIL 2008**

Esophageal Foreign Bodies

The superior esophagus is the narrowest portion of the alimentary tract of children and the most common site for lodge foreign bodies. Due to the nature of infants and toddlers to place objects in their mouth, especially a coin, this represent the most common foreign body identified within the proximal esophagus. The child will develop cough, stridor, choking, drooling, pain and inability to swallow with a lodge esophageal foreign body. Complications secondary to the esophageal foreign body itself include erosion/perforation, stricture, migration, mediastinitis and airway complications. Since aspiration and perforation are immediate complications, the impacted foreign body mandates urgent surgical attention. A simple chest film will delineate the position of the lodge coin. With other type of non-opaque foreign bodies an esophagogram will be needed to help visualized the position and type of obstruction. Rigid esophagoscopy under general anesthesia or flexible esophagoscopy under sedation is the procedure of choice to remove the foreign body, though Foley balloon extraction under fluoroscopic control is an acceptable method of coin extraction with minimal morbidity. Other times the foreign body can be pushed toward the stomach using esophageal bougienage. Children younger than one years, those with a widened tracheoesophageal interface, not a smooth object or more than one week after ingestion seems to be at highest risk for esophageal edema, failure of balloon extraction and complications.

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Lipomas

Lipomas are benign tumors accounting for 6% of soft-tissue tumors found in the pediatric age. They are ubiquitous and can occur anywhere in the body with a predilection for the trunk. Lipomas develop as painless, gradually enlarging swellings, soft to palpation and with demarcated borders. These neoplasms are slow growing and may reach great

proportions without producing significant symptoms depending on location. Mediastinal lipomas produce respiratory distress, while spinal cord lipomas are associated with significant neurological symptoms. Ultrasound will uncover the homogenous nature of the tumor, while CT or MRI will demonstrate the relation of the tumor with surrounding structures. Infiltration of surrounding structure rather than displacement suggests a malignant variant known as liposarcoma. Definite diagnosis can only be obtained by pathologic examination which must differentiate between lipoma, lipoblastoma, liposarcoma or myxoma. Needle aspiration biopsy can provide the diagnosis. Management consists of surgical resection to establish the diagnosis, alleviate symptoms if present and avoid local recurrence. Endoscopic excision or liposuction of large capsulated lipomas can be appropriate treatment and effective from a cosmetic point of view.

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Anal Canal Duplication

Anal canal duplication is a very rare congenital malformation: the most distal and least common duplication of the digestive tube. It can be confused with other types of anorectal pathology including hemorrhoids, fistula-in-ano, and perirectal abscess. Anal canal duplications are usually located posterior presenting as a one to 2 mm perineal opening just behind the anus in the midline. The tract runs along the posterior aspect of the anal canal without communication with the anorectum. Most cases are females. Simple perineal inspection makes the diagnosis. Older children will present with localized infection or pruritus. Most children are asymptomatic. Fistulography reveals a tubular structure or a cystic structure behind the normal anal canal whose length varies from 10 to 30 mm. Associated malformations include sacrococcygeal teratomas, dermoid cysts, sacral dysgenesis, hindgut anomalies and lumbosacral myelomeningocele. Non-invasive preoperative investigations consisting of pelvic X-ray, US examination, barium enema and fistulography, are sufficient in most cases; MRI is reserved to evaluate the presence of associated anomalies. Surgical treatment through a posterior sagittal approach or simple mucosectomy restores a normal perineal aspect without sequelae and avoids future complications like those described in other types of digestive duplications namely infection, ulceration, bleeding, and malignant changes during later adult life. Histology shows squamous epithelium on the surface of the fistula and columnar epithelium and goblet cells in the base, which confirms the diagnosis of an anal-canal duplication. Prognosis is good

after surgery.

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