



PEDIATRIC SURGERY Update © **Vol. 36 No. 03 MARCH 2011**

Intramural Duodenal Hematoma

In children, an intramural duodenal hematoma is a rare cause of proximal bowel obstruction and most commonly arises after blunt abdominal trauma. Common mechanisms include bicycle handlebar injuries, play or athletic injuries, child abuse and motor vehicle accidents. Other causes of intramural duodenal hematoma (IDH) are after endoscopic intestinal biopsy and spontaneously in children suffering from hemophilia, Henoch-Schönlein purpura and Glanzmann's thrombasthenia. The child develops epigastric abdominal pain, persistent vomiting with high output bowel obstruction and abdominal tenderness. Associated traumatic pancreatitis is found in 30% of cases due to the direct blow or associated with obstruction of the ampulla of Vater. CT contrast or MRI imaging will allow early and definite diagnosis. Treatment of IDH is conservative with bowel rest, nasogastric suction and parenteral nutrition. Ultrasound and UGIS can be used to follow resolution of the hematoma. Stricture formation, life-threatening hemorrhage or perforation is extremely rare sequelae in children. Surgery drainage may be needed in case of complications or if prolonged nonsurgical management fails. Scattered report of effective laparoscopically surgical drainage, internal incision and drainage by endoscopy and ultrasonically guided aspiration drainage has been published in the literature. In general the prognosis after resolution is good.

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Atypical Fibroxanthoma

Atypical fibroxanthoma (AFX) is an uncommon skin/subcutaneous tissue neoplasm

generally found in elderly Caucasian men with sun-damaged skin. It also rarely appears in children. AFX arising in children tends to occur on the limb and trunk areas. AFX typically begins as a solitary firm erythematous nodule that grows rapidly and may become ulcerated. Most lesions are less than 2 cm. AFX follows a benign clinical course and it rarely metastasize. Histologically, AFX presents as a dermal nodule composed of haphazardly arranged spindle cells with multinucleated giant and xanthomatous histiocytes scattered throughout the tumor. AFX is characterized for its cellularity, lack of organization, abnormal mitotic figures, pleomorphism and lymphocytic infiltrate around the edges. Management of AFX consists of complete excision. Recurrence occurs at a rate of 7% with the majority occurring within one year of excision. Poorly circumscribed or irregularly shaped tumors with infiltrative edges on histology may require larger clinical margins because they account for the majority of recurrences. AFX has been reported to metastasize to regional lymph nodes.

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Abdominal Pulmonary Sequestration

A pulmonary sequestration is a piece of nonfunctioning pulmonary tissue with no communication with the normal bronchial tree supplied by a systemic artery. Usually in the thorax (90%) they are classified as intralobar and extralobar. An extralobar sequestration can also be found in the abdomen of a child. Intraabdominal pulmonary sequestration is typically located in the left suprarenal area. The extralobar sequestration has a separate pleural lining. Most of these extralobar sequestrations are asymptomatic and appear as an infradiaphragmatic mass. The diagnosis can be suggested antenatally using ultrasound. Differential diagnosis includes neuroblastoma, duplication, teratomas and adrenal hemorrhage. MRI, color Doppler and angio-CT Scan can help define the mass and identify the feeder blood vessel. Associated conditions include diaphragmatic hernia and congenital heart disease. Management of abdominal pulmonary sequestration is surgical excision. Removal can be accomplished either open or preferably by laparoscopy. Laparoscopic excision has been demonstrated to be safe and better cosmetically.

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ISSN 1089-7739