



Esophageal Leiomyoma

Leiomyoma is considered the most common benign tumor of the esophagus. More common in adults than children. The mean age of involvement in pediatric patients is 14 years old with more girls affected than boys. Contrary to the predominant solitary and localized nodules found in adults, more than 90% of affected children harbor diffuse lesions. Associated anomalies include hiatal hernia, Alport's syndrome (nephropathy with hematuria, deafness and cataract), genital anomalies, esophageal peptic ulcer, cholelithiasis and rectal prolapse. Children demonstrate symptoms of slowly progressive dysphagia, weight loss, hematemesis, food impact, hiccups and choking. Rarely the tumor might affect the tracheobronchial tree. Diagnostic tests include esophagogram, endoscopy and CT-Scan. Barium swallow reveals a long-segment stricture and CT-Scan demonstrates a circumferential mass lesion in the lower esophagus. Endoscopic ultrasonography has also been used to diagnose the presence of a subepithelial tumor causing extrinsic compressions of the oesophagus. Biopsy through the endoscope is hazardous and is not recommended. Esophageal leiomyoma must be considered in the differential diagnosis of a mediastinal mass or esophageal stricture. Management consists of resection with primary or substitute esophageal reconstruction. Localized lesions may be amenable to enucleation. Diffuse lesions might need esophageal replacement.

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Meningococcal Sepsis

Meningococcal sepsis is a devastating condition caused by the bacteria *Neisseria Meningitidis*. Meningococcal septicemia can lead to purpura fulminans with subsequent

full thickness skin loss and deep muscle damage causing mutilating amputations of hands, digits, lower limbs and toes. Children with this condition are managed with aggressive intravenous fluids, vasoactive drugs, antibiotics, respiratory support and immunoglobulin therapy. The basic process in the pathophysiology of this condition that affects the microvasculature is increased vascular permeability, pathologic vasoconstriction and vasodilatation, loss of thromboresistance, intravascular coagulation and myocardial dysfunction. The lower limbs are predominantly affected. Surgical therapy is typically delayed in these children due to cardiovascular instability. Tissue loss can be extensive and difficult to determine at the outset. Surgical procedures consist of debridement, amputation, skin-grafting and soft-tissue releasing incisions. Recently, early microsurgical arteriolytic, freeing affected blood vessels, has proved a reliable method to decrease the level and reduce the amputation rate observed in these cases. Children requiring surgery for purpura fulminans achieve age-appropriate milestones and are primarily limited by their physical disability related to amputations, scarring and abnormal bone growth.

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All-Terrain Vehicles

All-terrain vehicles (ATV) injuries continue to produce morbidity and mortality in our kids. ATV include, four wheels vehicles, minibikes, golf carts, and go-karts. Children lack the physical strength, cognitive abilities, and fine motor skills to operate ATVs properly. Most cases of injury occur in males in the ages of 11 to 15 years. Children aged 0 to 5 years are more likely than older children to have facial injuries, whereas older children are more likely to sustain lower trunk and leg or foot injuries. Some of the recommendations that several medical organizations have proposed to reduce the injury rate include that laws should prohibit the use of ATV by children younger than 16 years of age, recreational use of ATV should be limited to people who have license to operate other motor vehicles, children between ages 16 and 18 should be supervised by a legal guardian, drivers should complete an approved training course, and operators should always wear a government-approved helmet, eye protection and protective clothing.

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