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Visceral Myopathy

Bowel dysmotility leading to severe intractable constipation in children is a very serious unsolved condition in pediatric surgery. Constipation needs initial rectal biopsy to determine if the child has ganglion cells or not present. As histopathological studies increase their diagnostic acuity we have a more relevant understanding of the physiology of altered motility in the small and large intestine. One of those components are the interstitial cell of Cajal (ICC) of the bowel. ICC are known to be essential regulators of gastrointestinal motility, they are called the pacemaker cells of the smooth muscle of the gastrointestinal tract. Studies have revealed reduced numbers or the absence of ICC in small intestine and colon that do not exhibit normal peristaltic activity (chronic idiopathic constipation). In patients with slow-transit constipation, the number of ICC is significantly decreased in all layers except the outer longitudinal muscle layer, while the myenteric plexus shows moderate hypoganglionosis. Persistent dysmotility problems after pull-through operation in aganglionosis may be due to altered distribution and impaired function of ICC. Delay in the development of ICC in the gastrointestinal tract may be a cause of intestinal pseudoobstruction in the newborn. Such conditions as pyloric stenosis, Hirschsprung's disease, hypoganglionosis, intestinal neuronal dysplasia, internal anal sphincter achalasia, megacystis microcolon intestinal hypoperistalsis syndrome have been reported to be associated with loss or deficiency of ICC.

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Endoscopic Injuries

The volume of gastrointestinal endoscopies done to children yearly has increased considerably over the last ten years. More children undergo diagnostic and therapeutic upper, lower and ERCP endoscopies. Most therapeutic endoscopic procedures are done on an ambulatory basis. The incidence of complications is near 0.06 to 0.5% depending on the procedure. Perforation of the colon during colonoscopy is the most serious endoscopic related injury in children due to the need of operative intervention from bacterial seeding and peritonitis. Upper endoscopy and ERCP entails complications such as mucosal tear, bleeding and bowel perforation. Most cases are amenable to nonoperative therapy. Bleeding complications might need transfusion, cauterization, endoscopic hemoclip or angiographic embolization. Perforation of the duodenum may need prompt surgical repair as they cause rapid chemical and bacterial peritonitis. Esophageal perforations are amenable to observation. Needless to say endoscopic procedures in children are very safe with a low incidence of complications. The more complicated the procedure, the higher the incidence of complications. Surgeons are always verb-called to assist such complications. Patients who survive the initial complications have excellent long-term outcomes.

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Snowboard Injuries

We don’t have snow in the tropics, but yearly thousands of kids suffer from snowboard injury. Unlike skiing, snowboard is a relatively new sport with a dramatic rise in popularity associated with serious injuries. Snowboarding males are more commonly affected than females, while skiers have a longer length of hospital stay. Skiers and snowboarder both sustain in order of higher frequency head, extremity (skeletal), and intra-abdominal injuries. Two-third occurs at licensed resorts, and one-third at parks or private property. Head trauma is the leading cause of death among both groups of sports. Curiously, helmet are required for all international snowboarding competitions, while is not usually utilized in recreational resorts. Risk of snowboard related injury was highest in beginners. Mean severity injury score and splenic injuries (snowboard spleen) are more commonly found in snowboarder than skiers since they do more aerial jumping maneuvers with a higher incidence of traumatic falls. Snowboarders who wore protective wrist guards were half as likely to sustain wrist injuries as those who did not wear guards. Elite snowboarders suffer more from knee than wrist injury.

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