Ulcerative Colitis

Ulcerative colitis (UC) is a chronic debilitating inflammatory disease of the bowel affecting primarily the mucosa and to a lesser extent to the adjacent submucosa. UC affects mainly the rectum and colon causing delayed growth and development. In some children the terminal ileum is affected. Cause of UC remains unknown. Peak incidence is between 1.5 and 17 years (mean 11 years). UC originates as an acute inflammation of the crypts (cryptitis) developing tissue reaction of chronicity. More than 90% children with UC have moderate to severe disease. Clinically, the child with UC develops bloody diarrhea, abdominal cramps, anemia, fever, tachycardia, hypoalbuminemia and weight loss. Colonoscopy is diagnostic. Medical management includes restriction of milk protein from diet, parenteral nutrition, steroids, sulfasalazine, metronidazole, 6-mercaptopurine, cyclosporine and tracolimus. UC can be cured by surgical resection of the colon. Indications for surgery in UC include inability to attain growth and development under medical therapy, fulminant disease refractory to medical therapy, extensive rectal bleeding, perforation and toxic megacolon. Surgical management consists of total proctocolectomy and ileal pouch anal anastomosis. The J-pouch is the simplest to construct. Retention of mucosa above the dentate line after surgery produces recurrent inflammatory disease and high risk of developing carcinoma. A low risk of bladder dysfunction and impotence due to damage to pelvic nerves is associated with proctocolectomy. Postop complications are associated with duration of the disease and length/dosage of medication (steroids). Long-term function after surgery is good in more than 90% of children with high patient satisfaction.

References:
Carotid Body Tumor

Chemodectomas (tumors of chemoreceptors cells origin) are called carotid body tumors when they occur in the carotid artery, and glomus tumors if they appear in the jugular vein. Sex distribution for the two major types is equal for males and females. A few cases have been reported in the pediatric age. They are associated with neck swelling and hypertension. Carotid body tumors (CBT) are extra-adrenal paragangliomas diagnosed early in life which can have familial inheritance. Familial cases are of autosomic dominant, bilateral in location and multicentric. Diagnostic work-up includes angiography, CT and MRI. Surgical excision is the treatment of choice for CBT and glomus tumors. Almost three-fourth of CBT and cervical paragangliomas are adherent to or surround adjacent arteries and cranial nerves. Their resection can result in neurovascular injury, stroke and excessive blood loss.

References:
4- Varudkar AS, Kokandkar HR, Gumaste GG, Bhople KS, Kumbhakarna NR: Carotid body paraganglioma with coexistent pheochromocytoma in childhood. Indian J Cancer 30(3):109-12, 1993

Perianal Dermatitis

Diaper dermatitis is a group of skin disorders resulting from attack of the skin by physical, chemical, enzymatic, and microbial factors in the diaper environment. Perineal or diaper dermatitis after colo-anal surgical procedures can be a troublesome condition in children. The two most common procedures associated with perianal dermatitis are pull-through for Hirschsprung’s disease and to a lesser extent following repair of imperforate anus. The main factors associated with this medical problem are the muscular pseudo incontinence associated with the procedure, frequent bowel movements, postoperative diarrhea and the alkali milieu in contact with the perianal skin. The rash can include mild redness, skin excoriation, pseudo verrucous papules and nodules depending on length of time of skin irritative contact. Histology shows benign epidermal hyperplasia, reactive acanthosis or
psoriasiform spongiotic dermatitis. Managing this condition can be very challenging. This includes water barrier agents, local therapy (A&D, nystatin, zinc oxide), binding agents (cholestyramine) and anti-diarrhea medication. The lesions regress when the irritating factor is removed. A novel approach to reduce the perianal diaper rash associated after closure of colostomy in infants is to paint the perianal skin with the liquid effluent of the colostomy at least two weeks prior to the intended procedure. This permits the perianal skin and proprioception reflex mechanism to adjust to the external skin milieu after closure of a colostomy.

References: