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## Mucocele

Mucocele of the appendix is a rare condition described when a thin-walled dilated appendix filled with mucous (cystic mass) is encountered in the right lower quadrant. Chronic obstruction of the appendiceal lumen is the most common etiological factor for a mucocele to appear. The appendiceal obstruction can be caused by lymph node mucosal hyperplasia or a tumorous mass such as a cystadenoma, adenocarcinoma or carcinoid. An excess of mucous is secreted in the face of proximal obstruction enlarging the appendix lumen. Clinically, the mucocele can present with chronic abdominal pain, an abdominal mass as an incidental finding during surgery or imaging. Most cases are seen in older adults with distinct female predominance. Typical ultrasound findings are a cystic mass with variable internal echogenicity, layered wall (onion skin sign), and calcifications in the wall. CT findings are those of a well-encapsulated cystic mass with a wall of variable thickness. If untreated, mucoceles may rupture producing a potentially fatal entity known as pseudomyxoma peritonei. Management is open surgical resection. Appendectomy is used for simple mucocele or for cystadenoma. Right hemicolectomy is recommended for cystadenocarcinoma. Laparoscopic resection is contraindicated due to possible dissemination of the tumorous mass.

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## Hemihypertrophy

Hemihypertrophy refers to soft tissue and bone overgrowth of one half of the body of the child, others time the upper or lower extremity might be solely affected. Hemihypertrophy can be congenital (idiopathic), or most of time the manifestation of a medical condition such as chronic lymphedema, lymphangiomatous malformations, neurofibromatosis, vascular malformations including the Klippel-Trenaunay-Weber syndrome, macrodystrophia lipomatosa, multiple enchondromatosis, or Maffucci's and Proteus syndrome. The

idiopathic congenital variety of hemihypertrophy is a rare condition seen infrequently, but associated with a high malignant potential. Diagnosis is always performed at birth or in the weeks following birth. The increase growth rate and temperature changes in the hypertrophied side increases the ipsilateral oncogenic potential. Hemihypertrophy is cosmetically unsightly and the psychological impact can be quite prolonged. Idiopathic hemihypertrophy is sometimes associated with primitive neoplasms of the liver, adrenals and kidneys, mild mental retardation, genitourinary anomalies, as well as with benign organ growth aberrations. Children developing scoliosis can be managed with orthopedic support or limb lengthening procedures. Regular clinical surveillance using yearly ultrasound for abdominal tumors is recommended. Hemihypertrophy is usually not inherited.

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## Buried Penis

Buried or hidden penis is a congenital anomaly in which the penile foreskin is not attached normally to the shaft so that the penis appears to be totally absent. The effect produces a pseudomicropenis in an otherwise healthy obese child. This is different to when an obese child has a thick suprapubic subcutaneous fat pad that conceals the penis. Buried penis includes an excessive development of the penile fascia which retracts the penis, insufficient attachment of the penile skin at the base of the penis, often excessive prepubic fat worsening the appearance of the abnormality but not by itself totally explaining it, and a tight phimosis often present. A surgical approach to the buried penis is warranted in most circumstances. There are psychological benefits to both the patients and the parents. The basis for surgical correction is directed at freeing the penile shaft from abnormal dartos attachments, fixing dartos fascia to Buck's fascia to prevent retraction of the penis, and providing adequate shaft skin coverage with the inner preputial skin. The surgical procedure usually brings significant cosmetic and functional improvement to the penis. Additional procedures are rarely needed due to recurrent retraction.

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