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Thyroid Cancer

In spite of presenting with advanced, multicentric and larger tumors children have a better survival than adults. Populations at risk: past radiation to head and neck, nuclear waste radiation, MEN II kindred. Clinical presentation is a solitary cervical mass or metastatic lymph node. Diagnostic work-up should include: sonogram (cystic or solid), thyroid scan (cold or hot), Fine-needle aspiration cytology(FNA), and Chest-X-Ray (lung metastasis 20% at dx). Pathology of tumors: papillary (majority, psammomas bodies), follicular (vascular or capsular invasion), medullary (arise from C-cells, multicentric, locally invasive), anaplastic (rare, invasive and metastatic). Management is surgical. Complications of surgery increase with decreasing age of patient: temporary hypoparathyroidism, recurrent nerve injury. Prognostic factors associated to higher mortality are: non-diploid DNA, psammomas bodies, over 2 cm diameter nodule, and anaplastic histology. Follow-up for recurrence with serum thyroglobulin level and radioisotope scans. Adjunctive therapy: thyroid suppression and radio-iodine for lymph nodes and pulmonary metastasis.

Cervical Lymphadenopathy

An enlarged lymph node is the most common neck mass in children. Most are anterior to the sternocleidomastoid muscle. Infection is the usual cause of enlargement; viral etiology and persist for months. Acute suppurative submandibular adenitis occur in early childhood (6 mo-3 yrs), is preceded by pharyngitis or URI, the child develops erythema, swelling and cellulitis, and management is antibiotics and drainage. Chronic adenitis: persistent node (> 3 wk., tonsillar), solitary, non-tender, mobile and soft. Generally no tx if < 1 cm, for nodes above 2 cm sizes with rapid growth, clustered, hard or matted do biopsy.

Other causes are: (1) Mycobacterial adenitis- atypical (MAIS complex), swollen, non-tender, nor -inflamed, positive skin test, excision is curative, chemotx is of no value. (2) Cat-Scratch adenitis- caused by A. Fellis, transmitted by kittens, positive complement fixation test, minimally tender, fluctuant regional nodes, spontaneous resolution. (3) Hodgkin's disease mostly teenager and young adults, continuing growth, non-tender node,

associated to weight loss, biopsy is diagnostic.

Undescended Testis: Early Surgery

The undescended testis found in 0.28% of males can be palpable (80%; most at inguinal canal), or non-palpable (20%). Testes that can be manually brought to the scrotum are retractile and need no further treatment. Parents should know the objectives, indications and limitations of an orchiopexy: that the testis could not exist (testicular vanishing syndrome), even after descend can atrophy, that it cannot be fixed and removal is a therapeutic possibility. To improve spermatogenesis (producing an adequate number of spermatozoids) surgery should be done before the age of two. Electron microscopy has confirmed an arrest in spermatogenesis (reduced number of spermatogonias and tubular diameter) in undescended testis after the first two years of life. Other reasons to pex are: a higher incidence of malignancy, trauma and torsion, and future cosmetic and psychological problems in the child. The management is surgical; hormonal (Human Chorionic Gonadotropin) treatment has brought conflicting results except bilateral cases. Surgery is limited by the length of the testicular artery. Palpable testes have a better prognosis than non-palpable. Laparoscopy can be of help in non-palpable testis avoiding exploration of the absent testis.

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