Pediatric neck masses

Mohammed Fathy Foda Abd Elaziz

Neck masses are frequent finding in the pediatric population andthe physician caring for a child with a neck mass may be faced with adiagnostic dilemma.The etiology of pediatric cervical masses includes a variety ofconditions. Unlike for the adult.The differential diagnosis of pediatric neck masses is wide,congenital, inflammatory and neoplastic.Neck masses are lumps that appear on child neck, often from aswollen lymph node that is caused by infection. Swollen lymph nodesusually return to their normal size within a few weeks. Lumps that arelarger than one centimeter or present for three or more weeks may be anindication of a more serious problem, such as congenital defect or evencancer.Pediatric patients generally exhibit inflammatory more frequentlythen congenital neck masses and developmental more than noplasticmasses.The most important diagnostic step is the physical examination ofthe head and neck, and visualization and palpation are the most importantcomponents of that examination. These help determine the location of themass according to anatomic lymphatic drainage areas or developmentalareas, the size of the lesion and its relationship to surrounding structures,the consistency of the mass, and presence of any pulsations or thrills.Listening for bruits or detecting the distinct odor of wet kerating andnecrotic tumor on the breath also is important.Often, however, even the most thorough physical examinationmerely gives the physician a general grouping, such as vascular, salivarySummary95or nodal, inflammatory, cognetial, or neoplastic, and not a firm diagnosis.At this point various tests may be helpful.For a patient whose mass is pulsatile or compressible or who has abruit or thrill, anagiographic or ultrasonographic tests may be ordered todifferentiate degenerative vascular problem such as aneurysms fromneoplastic conditions such as carotid bory tumpors. Ultrasound also helpdifferentiate a solid mass from a cystic mass as solid lymph nodes fromthryglossal cysts.Coputed tomography (CT) is the most helpful test, it maydifferentiate solid masses from cystic masses, locate a mass within aglandular structure or identify it as a free nodal lesion, and differentiatecongenital vascular lesions from lymph nodal chain.Magnetic resonance imaging (MRI) is often useful to identify thesite of the mass and its relation to the surrounding structures.The use of all these tests does not give a definitive diagnosis,except for the vascular tumor. Thus it is important not to become relianton these tests. Since most diagnosis must wait for surgical specimens.However, or the patient whose diagnosis after examination and testingremain uncertain but who is suspected of having inflammatoryadenopathy, a trial of antibiotic therapy and observation, not to exceed 2weeks, is acceptable as a clinical test.Biopsy with pathologic examination

and culture often is the finaldiagnostic test of preference. Biopsy only should be done, however, afterthe physician has done a complete head and neck examination usingindirect, direct, endoscopic, and radiographic methods.Summary96These conditions are treated by surgical excision except for someinflammatory masses, and often, those too must be exised for diagnosticreasons,The real question is when to excise the lesion in order to expeditetreatment in a cost-effective manner. In general, when signs ofinflammation are associated with the mass, antibiotic treatment withobservation for up to 2 weeks is acceptable. Persistence of the massbeyond that time, or an increase in mass size during that time suggeststhat surgical intervention must be considered. The timing of thatintervention may be tempered by the age group. A more prolonged periodof observation looking for growth, or the development of other associatedsymptom of malignancy is appropriate in childres, because of their lowincidence of malignant tumors.