Head and neck lesions of the infant

by Tara Oetken, MD

Diagnosed by exam and history		
Accessory Tragus	Skin-colored papule anterior to the normal tragus. Bilateral in ~10-20% of cases.	Many associated genoderms, however most children are completely normal.
Cephalohematoma	Subperiosteal hematoma. More common after prolonged labor, instrument assisted deliveries. Develop in the first hours after birth. Do not cross the midline. Spontaneous resorption and resolution over several months.	Complications include calcifications, hyperbilirubinemia, and infection
Caput Succedaneum	Localized edema. Boggy mass of the scalp with varying degrees of bruising and necrosis. Cross the midline. Spontaneously resolves over 48 hours.	No treatment needed. Sometimes permanent alopecia can occur (halo scalp ring)
Deep Infantile Hemangioma	Skin-colored to bluish, soft, freely mobile nodule which appears weeks to several months after birth and continues to grow for ~ 1 year.	May be difficult to distinguish from vascular malformation (more common on the extremities), and U/S may be needed.
Encephalocele	Soft mass that can enlarge with crying. May transilluminate. Compressible.	Often seen with other neurologic abnormalities. When suspected, imaging and referral to neurosurgery should be prompt.
Juvenile Xanthogranuloma (JXG)	Yellow/red/orange papule on the head.	~20% present at birth. Can have extracutaneous involvement, MC is eye, second MC is lung. If associated with NF-1, > 20x increased risk of JMML. Resolve on their own.
Leptomeningeal Cyst	Pulsatile non-tender mass at site of previous head trauma.	
Lipoma	Skin-colored, soft, rubbery subcutaneous nodule(s). Most commonly on the neck, shoulders, back, abdomen.	Can be seen in infancy, but more common after puberty.
Nasal Glioma	Firm, non-compressible, non-pulsatile mass that does not transillumate.	Often mis-diagnosed as infantile hemangioma due to erythematous color and prominent telangiectasia.
Pilomatricoma	Hard subcutaneous mass, often skin to bluish in color. May ulcerate.	Cheeks and eyebrows are common locations. If multiple lesions present, associations include Gardner Syndrome, Myotonic Dystrophy and Rubenstein-Taybi.
Pilar Cyst	Slowing growing, skin-colored, mobile subcutaneous mass. Often more than one lesion	Small subset are AD inherited. Lack granular cell layer on path.

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Diagnosed with imaging and biopsy		
Dermoid Cyst	Firm, non-compressible, non-pulsatile subcutaneous lesions. MC location is the lateral eyebrow. Other common locations include medial eyebrow/nasal bridge.	Those on the nose or midline scalp are at higher risk of having intracranial extension. Imaging is required prior to surgical excision.
Eosinophilic Granuloma	Focal tender painful swollen mass.	Self resolving variant of Langerhans cell histiocytosis.
Infantile Myofibromatosis	Firm, skin colored to vascular appearing, subcutaneous nodule. MC locations are head, neck, trunk and upper extremities.	Most common fibrous tumor of infancy. Lesions w/o visceral involvement tend to involute in 1-2 years.
Melanotic Neuroectodermal Tumors of Infancy	Rare. Usually present in the 1st year of life as rapidly growing, non-mobile, non-ulcerative bluish/black mass. Most common in the anterior maxilla but cases in the skull and extremities are reported. Normally painless and benign, but malignant transformation is reported in ~6-7%	MRI is preferred imaging. Treatment is complete surgical resection.
Neuroblastoma	Red to bluish, firm, asymptomatic nodules. If rubbed will blanch and have erythematous rim due to catecholamine release.	Skin metastasis are present in ~1/3 of cases.
Rhabdomyosarcoma	Painful, rapidly growning. Appearance can vary from small nodule to large vascular like plaque.	Rare in skin but can present as a metastasis. Head and neck are the most common sites of presentation

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