Nasal epidermoid cyst with sinus tract

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A 2-year-old girl underwent MRI evaluation of a prominent nasal bridge. A 1.0×0.6-cm midline nonenhancing lesion was seen embedded in the nasal bone that was isointense to gray matter on T2-W (Fig. 1, *large arrow*) images and demonstrated restricted diffusion (Fig. 2, *arrow*). There was a linear sinus tract extending from the lesion to the floor of the anterior cranial fossa (Fig. 1, *small arrow*). These findings are suggestive of a nasal epidermoid cyst.

Differentials include nasal dermal sinus, anterior cephalocele, and nasal glioma [1]. Nasal dermoid and epidermoid cysts result from congenital failure of involution of the anterior neuropore and are best evaluated with MRI. Epidermoid cysts have less T1 shortening than dermoid cysts, which contain fat in addition to desquamated epithe-

Fig. 1 Mid-sagittal T2-W image

Fig. 2 Diffusion-weighted image

lium. Epidermoid cysts, with epithelial cells' tendency to grow in layers, have increased restricted diffusion compared to dermoid cysts [2]. Surgical resection is warranted given the potential complications of osteomyelitis and meningitis.

References

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