The ABCs of ACP: The Case of an Antrochoanal Polyp in an 11-Year-Old Female Pediatric Patient

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Antrochoanal polyps (ACPs) are benign lesions that arise from the maxillary sinus mucosa. This rare nasal mass is more commonly seen in pediatric populations and may present similarly to nasal malignancies.

Presentation

An 11-year-old female was admitted to the pediatric ICU from an outside hospital for an enlarging oral mass. She was unable to talk but was able to nonverbally communicate that she had no pain or trauma to the area. The patient's mother reported that the patient had a coughing episode earlier that day, after which she had complained that it felt weird to breathe. At that time, a large oral mass was seen, and reportedly had kept growing. She had no personal medical history or family history of head or neck masses. Her vital signs were appropriate for her age and were stable. Physical exam revealed a large mass superficial to the tongue.

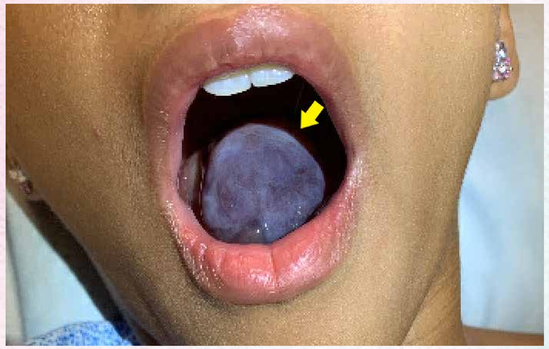

Figure 1. A visual image of the nasopharyngeal mass seen at the time of admission.

Patient Course

Dexamethasone was started and a consult to ENT was placed. A bedside examination and nasopharyngolaryngoscopy (NPL) by ENT showed a patent airway and confirmed the mass over the tongue. Overnight, the patient awoke feeling as if she had swallowed something. She still had muffled voice, but her throat swelling and her breathing had improved. She was now able to open her mouth with ease. Posterior pharyngeal exam was concerning for a mass versus a large blood clot. Repeat NPL was suggestive of a mass from the left nare passing into the nasopharynx and oropharynx. The differential diagnosis at this time included rhabdomyosarcoma, ACP, and juvenile nasopharyngeal angiofibroma.

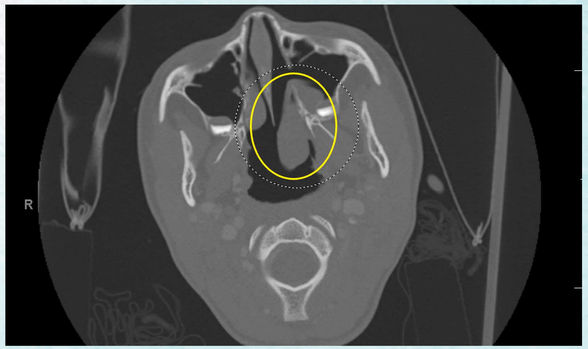

Figure 2. An axial CT scan of the neck showing a soft tissue mass on the left and centrally within the nasopharynx. The mass began in the nasal cavity and descended inferiorly on the left to the level of the oropharynx flattening the epiglottis.

Diagnostic Evaluation

CT imaging of the mass with CT showed a large pedunculated soft tissue mass originating at the left maxillary antrum, extending inferiorly to the epiglottis. A clinical diagnosis of giant ACP was made, and the patient underwent left nasal endoscopy with maxillary sinusotomy and removal of the mass. Pathology confirmed the diagnosis of ACP. The patient's symptoms resolved, and she was discharged from the hospital.

Discussion/Conclusion

This case represents the importance of a thorough workup for pediatric nasal masses. When large enough, ACPs can protrude into the nasopharynx leading to non-specific features that can also be seen in nasal malignancies. The gold standard for diagnosis includes a detailed history, nasal endoscopy, and CT imaging. Pathology is required to exclude a malignancy.

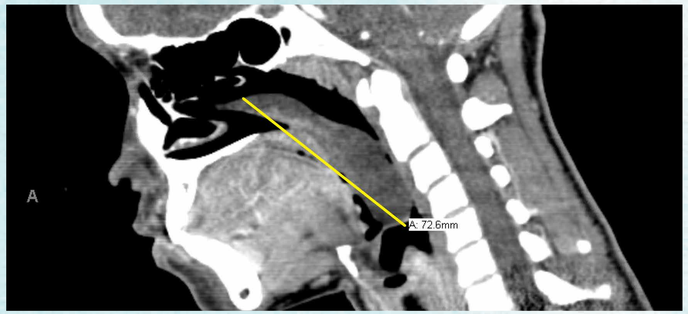

Figure 3. Sagittal view of the head that showing a pedunculated, mucoid soft tissue mass extending from the left paranasal sinuses and extending into the nasal cavity. Inferior extension into the nasopharynx and oropharynx was to the level of the epiglottis. The mass measured greater than 72 mm from its superior to inferior aspect.

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