

Antrochoanal polyp with extension to the oropharynx. A case report

Pólipo antrocoanal con extensión a orofaringe. Presentación de un caso

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Seno maxilar
Senos paranasales

Summary

Antrochoanal polyps are benign polypoid lesions that arise from the maxillary sinus (predominantly) and extend into the nasal cavity through the ostium. They correspond to 4% to 6% of sinonasal polyps, and was initially described by G Killian in 1906. It often occurs in children and young adults and it is almost always unilateral. Its clinical presentation is related to obstructive and sinus symptoms, the largest being visible on direct examination through the mouth. For its evaluation, CT and MRI can give valuable information about topographic anatomy as well as extension and involvement of adjacent regions.

Resumen

El pólipo antrocoanal es una lesión polipoidea benigna que surge mayoritariamente del antro maxilar y presenta extensión hacia la cavidad nasal ipsilateral a través del orificio de drenaje. Representa del 4 al 6 % de los pólipos nasales, y fue descrito por primera vez por G. Killian en 1906. Usualmente, se presenta en niños y adultos jóvenes, es predominantemente unilateral. Su manifestación clínica se relaciona con síntomas obstructivos sinusales, y los de mayor tamaño son visibles al examen directo a través de la boca. Para su evaluación, además del examen directo, la tomografía axial computarizada (TAC) y la resonancia magnética (RM) pueden dar información valiosa acerca de la anatomía topográfica, así como de su extensión y compromiso de regiones adyacentes.

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Case report

15-year-old female patient with rhinorrhea and left unilateral nasal ventilatory insufficiency associated with tumor, observed through the fauces in the oropharynx during the otorhinolaryngological physical examination (figure 1). She has no relevant medical or clinical history; she has as surgical history the resection of a tumor of white parts (dermatofibrosarcoma protuberans) in the abdominal wall.

Due to the findings described above, a computed axial tomography (CT) of the paranasal sinuses without intravenous contrast medium (figure 2) and magnetic resonance imaging (MRI) of the craniofacial mass with intravenous contrast medium (figure 3) were performed.

Preoperative CT and MRI showed complete obstruction of the maxillary sinus and left nostril by soft tissue extending into the upper airway and contacting the base of the tongue, consistent with the direct physical examination (Figure 1).

The patient underwent surgery for increased respiratory distress and rapid tumor growth.

During the surgical procedure, under general anesthesia, by videoendoscopy with 30° optics through the right nostril, total blockage of the left nostril was visualized by a space-occupying lesion emerging from the ostiomeatal complex with insertion in the anterolateral wall of the maxillary sinus, extension to the upper airway and contact with the base of the tongue. The procedure was tolerated by the patient, without complications.

The surgical specimen was analyzed by pathological anatomy and the result was: polypoid formation of myxoid aspect.

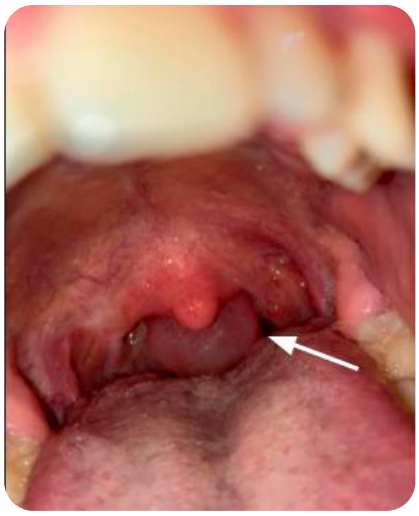


Figure 1. Photograph with open mouth. Polypoid lesion in projection of the oropharynx, immediately posterior and in contact with the uvula.

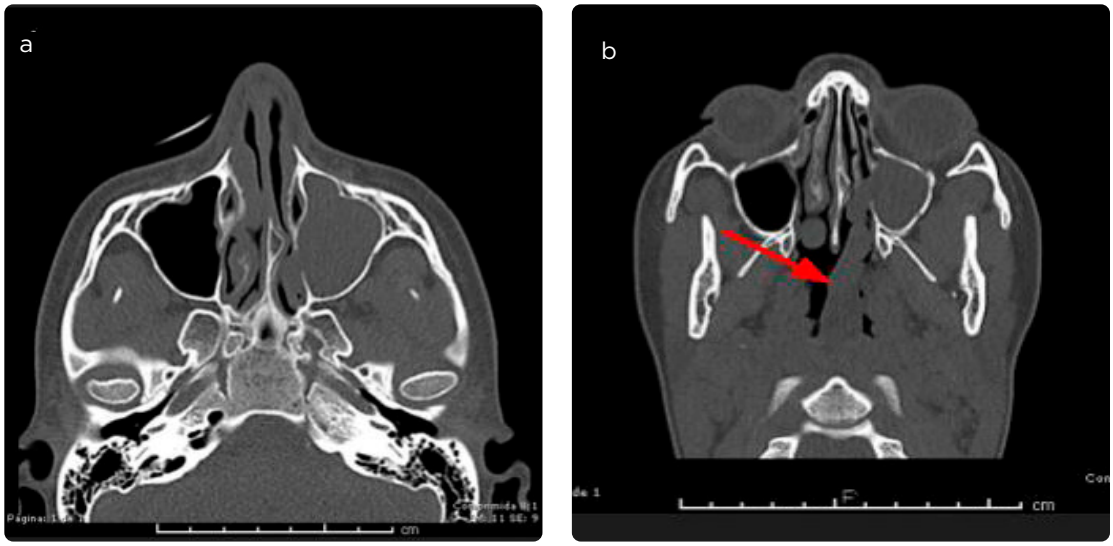


Figure 2. CT of paranasal sinuses. a) Axial. b) Oblique coronal. Total opacification of the left maxillary sinus. A lesion of polypoid aspect is identified that projects towards the homolateral nasal cavity (red arrow), the nasopharynx and, caudally, reaches the oropharynx.

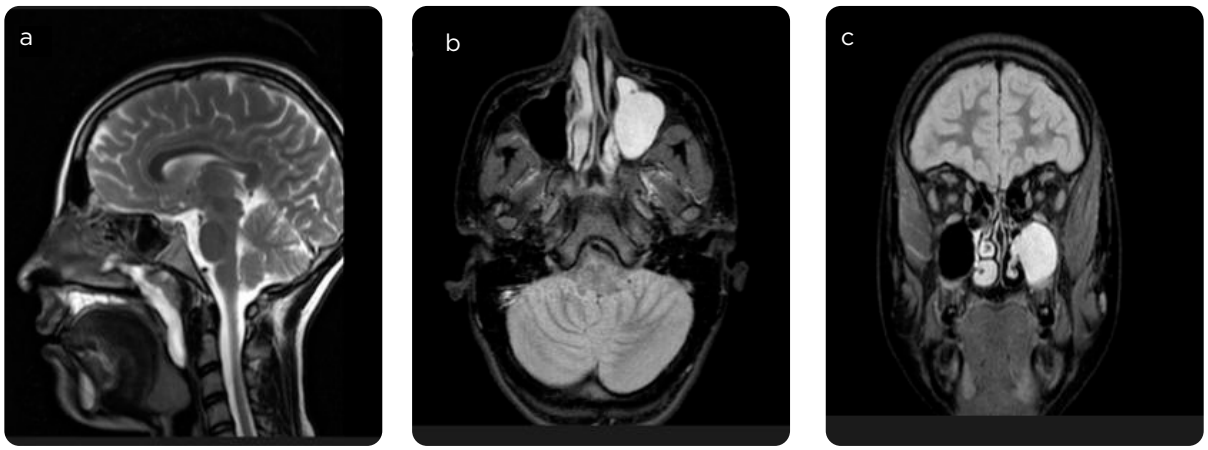


Figure 3. MRI. a) Sagittal, sequence with T2 information. b) Axial, STIR sequence. c) Coronal, STIR sequence. High signal image in T2/STIR sequences, of polypoid aspect, showing projection from the antrum of the left maxillary sinus until reaching the oropharynx, in intimate contact with the posterior aspect of the soft palate.

Discussion

The antrochoanal polyp is a benign tumor of the mucous membrane of the maxillary sinus. During its growth, it passes through the sinus orifice and extends into the nasal cavity and, through the choana, into the throat (1).

Knowledge of the normal anatomy and physiology of the paranasal sinuses is important to understand the pathogenesis of their disease (2).

Differential diagnoses include other masses that have a maxillary antral component, such as mucocele, inverted papilloma, allergic fungal rhinosinusitis and other sinonasal polyps (3). When bone destruction is present, other diseases should be considered, such as lymphoma, Wegener's granulomatosis or rhabdomyosarcoma (3, 4).

CT allows a relatively easy diagnosis, even in atypical forms. Coronal slices perpendicular to the hard palate should extend from the anterior part of the frontal sinus to the posterior wall of the maxillary sinus (5). Axial sections complete the radiological study, since they allow to appreciate the structures from the choana to the orifice of the maxillary sinus (5). It is not necessary to use intravenous contrast medium, but it is necessary to evaluate with bone algorithm, whose appearance is homogeneous in CT with an intermediate density of 20 to 30 HU. In MRI, the signal is intermediate in the sequence with T1 information and has a high signal in the sequence with T2 information (5).

Although it is an infrequent finding, it is useful to know in advance this pathology in daily radiological practice. The importance of methods such as CT and MRI in the precise diagnosis and surgical planning is recognized, in order to delimit the anatomical references.

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