CASE STUDY

Extranasopharyngeal Angiofibroma of the Left Lower Turbinate: A Case Report

Fibroangioma extranasofaríngeo de cornete nasal inferior: presentación de un caso

Rodolfo Nazar,∗ Alfredo Naser, Fabian Rubio, Gonzalo Ortega

Departamento de Otorrinolaringología, Hospital Clínico de la Universidad de Chile, Santiago de Chile, Chile

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Clinical Case

We present the case of a 9-year-old male patient, lacking morbid antecedents, referred to our service due to 2 episodes of massive epistaxis. The first one was self-limiting, while the second required anterior nasal packing. Physical examination revealed a tumour in the left nostril, with a vascularised appearance. The initial diagnosis was nasopharyngeal angiofibroma, due to the appearance of the tumour and to the episodes of massive epistaxis.

The initial nasal endoscopy revealed abundant blood content associated with a vascular-appearing tumour mass from the lateral wall of the left nostril. It was impossible to visualise the nasopharynx in this study because the examination was not tolerated. Due to the vascular appearance of the mass, the suspected diagnosis was nasopharyngeal angiofibroma.

Computed tomography (Fig. 1) revealed an ovoid lesion adhered to the cartilaginous part of the nasal septum, with soft tissue density, lacking significant contrast uptake. Bone tissue was not compromised and the pterygopalatine fossa did not present any pathological findings. The radiological diagnostic hypothesis was nasal polyp, because it would be less probable that it would correspond to an angiofibroma given its behaviour.

A second endoscopic examination was performed, revealing a tumour apparently dependent on the nasal septum, without lesions in the nasopharynx. Given the endoscopic and imaging results, the suspected diagnosis was pyogenic granuloma of the nasal septum. Consequently, endoscopic resection and deferred biopsy were scheduled.

In the operation a lesion of 1 cm in diameter was observed in relation to the head of the left inferior turbinate. This was completely resected using cutting forceps and microdebrider. Postoperative evolution was satisfactory, without complications.

The deferred histological study showed stroma composed of mesenchymal proliferation with blood vessels lined with normal endothelium of variable lumen surrounded by fibrous stroma with presence of fused cells and stellate fibroblasts; there was no atypia, necrosis or mitosis. The specimen was histologically consistent with nasal angiofibroma (Fig. 2).

Bearing in mind the histological findings, the definite diagnosis was angiofibroma of the inferior turbinate.

At the 1-year follow-up, the patient was disease free.

Discussion

A nasopharyngeal angiofibroma is a benign vascular tumour located in the nasopharynx that represents 0.5% of all head
and neck tumours. It mainly affects adolescent males and has an invasive local growth capable of destroying local bone. A pink or bluish nodular mass that protrudes towards the nasopharynx can be found in the physical examination. The most common clinical presentations are nasal obstruction (90%) and recurrent massive epistaxis (60%). Angiofibromas located outside the nasopharyngeal area are extremely rare and, consequently, may be misdiagnosed.

A 2004 review indicated 65 patients diagnosed with extra-nasopharyngeal angiofibroma, with 73% being found in males. The most common location was the maxillary sinus (25%), followed by the ethmoids, nostril and nasal septum. Being located in the inferior turbinate is even more exceptional, with there being only 5 cases described in the world literature.

This would be the sixth case of angiofibroma in the inferior turbinate described in international literature.

Extra-nasopharyngeal angiofibromas present with a variety of symptoms depending on their location; however, due to the reduced space, intranasal tumours show symptoms earlier than others. The common clinical presentation of angiofibromas located in the inferior turbinate is unilateral nasal obstruction and massive epistaxis.

Differential diagnosis is necessary between a nostril-located angiofibroma and a lobular capillary haemangioma, sinonasal-type haemangiopericytoma, antrochoanal polyp, angiomatous polyp, teratoma, encephalocele, dermoid cyst, papilloma, chordoma and carcinoma.

Because extra-nasopharyngeal angiofibromas are less vascularised than the nasopharyngeal ones, contrast uptake in computed tomography is light to moderate.

The treatment of election is surgery. Because the mass was located only in the anterior area of the nostril, this case was considered a good candidate for resection through endoscopic surgery.

Recurrence rates for nasopharyngeal angiofibromas range from 13% to 50%. Consequently, periodic postoperative control is also required in an extra-nasopharyngeal presentation.

Conflict of Interest

The authors have no conflict of interest to declare.

References


