Juvenile Nasopharyngeal Angiofibroma: An Atypical Case

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A 31-year-old male came to the clinic due to emaciation and nasal obstruction lasting for 13 months; he had never presented any epistaxis. In the nasal endoscopy, a mass was found in the right fossa to protrude into the oropharynx (Figure 1). The computerized tomography scan did not reveal erosion of the sphenopalatine foramen nor any spread towards the sphenopalatine fossa (Figure 2). A malignant lesion was suspected and a biopsy was taken and later reported to be a juvenile nasopharyngeal angiofibroma (JNA). Angiography revealed a mass with scant irrigation (Figure 2).

The lesion was resected by the transnasal endoscopic route, without pre-operative arterial embolization and with 150 mL of blood loss. The histopathological study revealed the characteristic appearance of JNA, with predominance of the fibrous component throughout the extension of the tumour (Figure 3). This kind of histological pattern may explain the uncharacteristic clinical presentation and the scant vascular contribution seen in the arteriogram and during surgery.

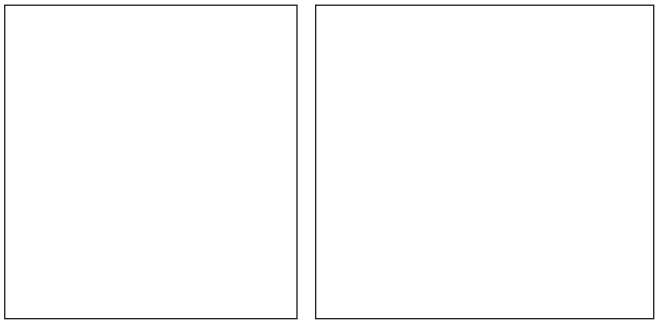

Figure 1. Endoscopic images. A: right nasal fossa occupied by a lobulated mass of fleshy appearance. B: left nasal fossa showing spread into the rhinopharynx and partial obstruction of the Eustachian tube. *indicates tumoral mass; CI, lower turbine; S, nasal septum; TE, nasal orifice of the Eustachian tube.

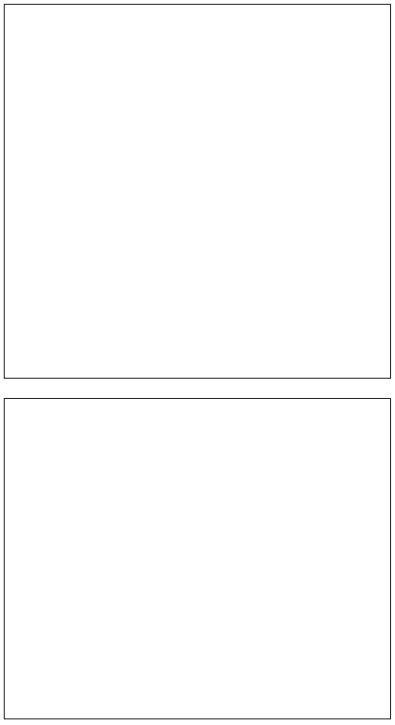

Figure 2. Top: axial slice of a computerized tomography scan showing a tumoral lesion occupying the posterior part of the right nasal fossa and the rhinopharynx. The sphenopalatine foramen was observed to be free of erosion and the sphenopalatine fossa (arrow) unaffected. Bottom: frontal arteriographic image of the right internal maxillary artery revealing scant vascular contribution from the right sphenopalatine artery. Asterisk: tumoral mass; arrow: sphenopalatine artery.

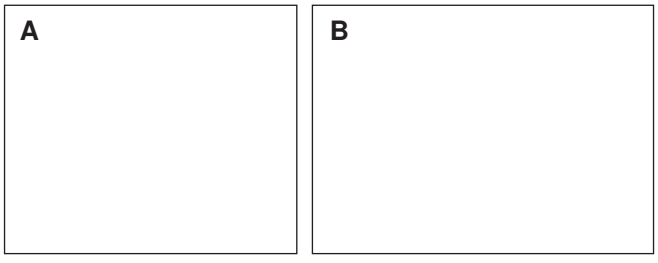

Figure 3. Histological slices of the surgical specimen, stained with haematoxylin-eosin, lighted microscope. A: hypercellular fibrovascular tissue, dilated thin-walled vascular canals can be seen (×40). B: wall of vascular canal comprising 2 cellular layers surrounded by fibrous stroma formed mainly by fibroblasts (×100). Slices of the entire tumoral extension showed a similar fibrous pattern. CE indicates endothelial cell; F, fibroblast; P, pericyte.

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