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Case Report

Hemangioma of the Rhinopharynx: About A Case

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Abstract

Hemangiomas are the most common vascular lesions in early childhood. More than half of the cases involve head and neck. The case of 1 patient consulted following an epistaxis associated with a unilateral nasal obstruction. The CT and nasal sinus angio-MRI (Figure-2) objectified a heterogeneous mass of the posterior wall of the cavum, Cerebral arterography evoked a hemangioma with the presence of a vascular blush, There was no enlargement of the sphenopalatine hole. A preoperative embolization was performed to prevent massive intraoperative bleeding. Surgical management consisted of an exclusive endoscopic endonasal removal of the tumor. Histologically, mixed hemangioma is characterized by the association of lobular proliferation consisting of a central vessel surrounding smaller vessels in the breast of a stromafibromyxoide and sinusoid lakes with blood throats.

Keywords: Hemangiomas, cavum, stromafibromyxoide, Rhinopharynx.

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Introduction

Hemangiomas are the most common vascular lesions in early childhood. More than half of the cases involve head and neck [1]. Unlike childhood hemangiomas, adult hemangiomas grow progressively and do not spontaneously regress. Nasosinusis hemangiomas are relatively rare, which develop at the expense of the nasal mucosa, mimicking nasopharyngeal fibroma when located in the cavum. Bone hemangiomas are more rare of interest to the septum, the clean bones of the nose or the maxilla.

MATERIALS AND METHODES

We report the case of 1 patient aged 60 years, who consulted following an epistaxis associated with a unilateral nasal obstruction evolving since 6 months on average. The nasal endoscopy (Figure-1) revealed a reddish, vascular-like tumor protruding at the level of the cavum, bleeding on contact, and suspecting nasopharyngeal fibroma.

The CT and nasal sinus angio-MRI (Figure-2) objectified a heterogeneous mass of the posterior wall of the cavum, rising very strongly after the contrast was injected. No cervical adenopathy was objectified. Cerebral arterography evoked a hemangioma with the presence of a vascular blush, and fed by branches from

the maxillary artery. There was no enlargement of the spheno-palatine hole or backflow of the posterior wall of the maxillary sinus (thus excluding the diagnosis of nasopharyngeal fibroma). A preoperative embolization was performed to prevent massive intraoperative bleeding.

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Surgical management consisted of an exclusive endoscopic endonasal removal of the tumor. Histology confirmed the diagnosis of lobular capillary hemangioma of the cavum by highlighting a proliferation of thick-walled vessels, Regular endoscopic checks do not objectify recurrence with a 24-month regression.



Fig-1: CT Scan sagitall section of hemangioma of cavum



Fig-2: MRI axial section of cerebral hemangioma of cavum



Fig-3: CT scan AXIAL sections of hemangioma of cavum

DISCUSSION

Nasopharyngeal hemangiomas are rare vascular tumors. In adults, hemangiomas are much less common than in children, but they progress with age and do not spontaneously regress. At the nasal endoscopy they appear as a firm, bright red, pulsatile and uncompressed mass unlike vascular malformations [3]. Endoscopic examination only explores the focal part of the lesion, so it often requires additional imaging (scanner and MRI) for a complete assessment [5]. Angiography is useful for observing vascular abnormalities and allows selective embolization to reduce intraoperative bleeding [3].

The main differential diagnosis of cavum hemangiomas occurs with angiofibromas, which appear in the foramen spheno-palatine region and extend to the pterygo-palatine pit [6]. It is also necessary to differentiate between carcinomas of the rhinopharynx [6], the latter are aggressive and may extend to parapharyngeal, paranasal sinus or endocranial spaces, and often associated with cervical adenopathies. Laser excision, sclerotherapy and intralesional steroid treatment can be considered as alternative treatment options [1, 4]. Surgical excision remains the most effective treatment and often results in complete healing.

Hemangiomas are classified into six types: capillary, venous, cavernous, mixed, arterial and venous. Hemangiomas develop mainly during the neonatal period. However, these lesions may occur at any age as demonstrated by our observation [7, 8]. Histologically, mixed hemangioma is characterized by the association of lobular proliferation consisting of a central vessel surrounding smaller vessels in the breast of a stromafibromyxoide and sinusoid lakes with blood throats [9].

CONCLUSION

Although rare, the knowledge of cavum hemangiomas allows it to be taken into account in the differential diagnosis in front of a hypervascular tumor of the rhinopharynx which is not synonymous with nasopharyngeal fibroma. Imaging (CT, MRI and Arteriography) supports the diagnosis and allows for prior embolization during arteriography. The treatment

is conservative and prefers an endoscopic endonasal approach with total tumor removal. The diagnosis of certainty remains histological.

REFERENCES

- Som, P. M., & Curtin, H. D. (2011). Head and neck imaging, 5th ed. St. Louis, MO: Mosby, 1749-1779
- 2. Flors, L., Leiva-Salinas, C., Maged, I. M., Norton, P. T., Matsumoto, A. H., Angle, J. F., ... & Housseini, A. M. (2011). MR imaging of soft-tissue vascular malformations: diagnosis, classification, and therapy follow-up. *Radiographics*, 31(5), 1321-1340.
- 3. Connor, S. E. J., Flis, C., & Langdon, J. D. (2005). Vascular masses of the head and neck. *Clinical radiology*, 60(8), 856-868.
- 4. Fuchsmann, C., Quintal, M. C., Giguere, C., Ayari-Khalfallah, S., Guibaud, L., Powell, J., ... & Froehlich, P. (2011). Propranolol as first-line treatment of head and neck hemangiomas. *Archives of otolaryngology—head & neck surgery*, 137(5), 471-478.
- 5. Vilanova, J. C., Barceló, J., Smirniotopoulos, J. G., Pérez-Andrés, R., Villalón, M., Miró, J., ... & Ros, P. R. (2004). Hemangioma from head to toe: MR imaging with pathologic correlation. *Radiographics*, 24(2), 367-385.
- 6. Chong, V. F., & Fan, Y. F. (2000). Radiology of the nasopharynx: pictorial essay. *Australasian Radiology: Diagnostic Radiology*, 44(1), 5-13.
- 7. Tasca, R. A., & Williams, R. G. (2004). Capillary haemangioma of the nasal cavity in a 7-week-old baby—successful treatment using intralesional steroid injection. *International journal of pediatric otorhinolaryngology*, 68(3), 365-367.
- 8. Bakhos, D., Lescanne, E., Legeais, M., Beutter, P., & Morinière, S. (2008, April). Hémangiome caverneux de la fosse nasale. In *Annales d'Otolaryngologie et de Chirurgie Cervico-faciale* (Vol. 125, No. 2, pp. 94-97). Elsevier Masson.
- 9. Karagama, Y. G., Howarth, K., Steel, P. R. M., & Spencer, M. G. (2002). Lobular capillary haemangioma of the nasal vestibule: a rare entity. *International journal of pediatric otorhinolaryngology*, 66(1), 71-75.