CASE REPORT

Cavernous haemangioma of the nasal cavity: a rare cause for epistaxis

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ABSTRACT

Cavernous haemangiomas are benign tumors exceedingly rare in the nose. This pathology is mostly seen in the adult patients and, when it occurs, it can produce a severe epistaxis. A 67-year-old woman was referred in emergency to our Otorhinolaryngology Department with severe epistaxis of the right nasal cavity. The patient was admitted for investigation of her severe anaemia. Anterior rhinoscopy of the right nasal cavity revealed a diffuse bleeding, with further ointment gauze packing treatment and good evolution for one day; a posterior balloon catheter was necessary for the repeated bleeding in the oropharynx. In the fourth day of evolution, another episode of posterior bleeding appeared and the patient underwent surgical cauterization of the sphenopalatine artery by endoscopic endonasal approach. Excision of a local mucosal tissue from the sphenopalatine artery area was sent for histopathology evaluation with no suspicion of a haemangiomatous lesion. The final histopathological exam revealed a cavernous haemangioma.

KEYWORDS: cavernous haemangioma, epistaxis, nasal endoscopy

INTRODUCTION

Cavernous haemangioma is a benign tumor, rarely seen in the nasal cavity[1]. These neoplasms usually present severe epistaxis and the patients require immediate local treatment.

In the nasal cavity, the intraosseous cavernous haemangiomas are extremely rare at the level of the middle turbinate and the inferior turbinate[2,3,4]. The transnasal endoscopic approach is the method of choice for removal of tumors or ligation of the sphenopalatine artery[4,5].

We present an unusual case of severe epistaxis that proved to be an unexpected cavernous haemangioma of the lateral wall of the nasal cavity.

CASE REPORT

A 67-year-old female patient was referred to our Emergency Department because of a severe epistaxis from the right nasal cavity. Anterior rhinoscopy revealed a diffuse bleeding with no obvious source in the oropharynx, and ointment gauze packing was done in the right nasal cavity with a favourable evolution. She was admitted for investigations. The blood tests revealed a haematocrit of 31.38%, haemoglobin concentration was 8.8g/dL with thrombocytopenia of 73.12 $10^{*}9$/L. The patient needed homologous blood transfusions with red blood cells, plasma and platelets.

Two days later, the bleeding appeared in the oropharynx and a posterior packing was done with a good evolution for 3 days. Due to the new episode of posterior nasal bleeding appeared after removing the posterior packing, we decided to perform an endoscopic evaluation of the nasal cavity under general anaesthesia. During the endoscopic examination, the electrical cauterization of the right sphenopalatine artery was performed and a suspicious lesion situated in the area of the sphenopalatine artery was excised and sent for histopathological examination.

The histopathological study revealed a tumor with large blood-filled spaces with flattened endothelium, suggestive for cavernous haemangioma (Figure 1).

The patient followed a satisfactory post-operative course and she was discharged from the hospital after 2 days. The 6-month follow-up consisted in nasal endoscopy, which revealed no recurrence of the lesion, with no other episodes of nasal bleeding present (Figure 2).

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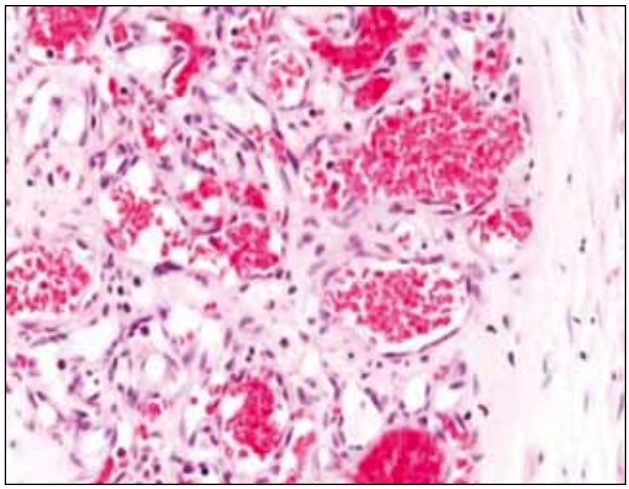

Figure 1 Histopathological examination showing dilated vessels - cavernous haemangioma

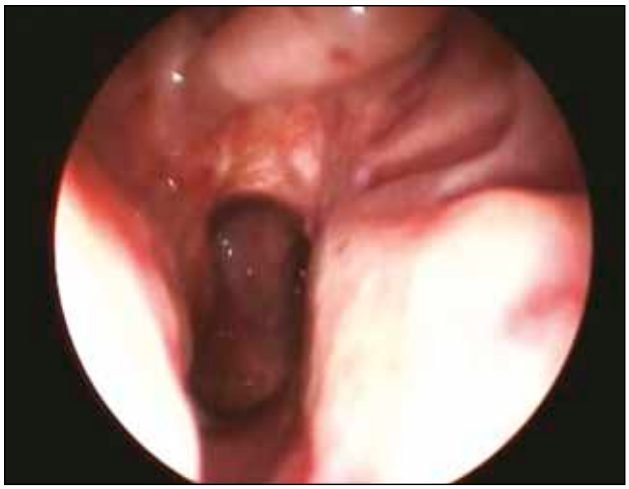

Figure 2 Postoperative 6-month follow-up

DISCUSSIONS

Haemangiomas are common lesions in the head and neck region, but rare in the nasal cavity, especially the turbinates. The literature described series of cases with cavernous haemangioma arising from the posterior part of the inferior turbinate, causing haemoptysis or epistaxis[1,6,7]. The mean age for presentation of cavernous haemangiomas is around 40 years and sex incidence appears equal[8]. Our case was a 67-year-old female. Recurrent epistaxis or haemoptysis can be produced by this slowly growing haemorrhagic tumor[8,9]. Our case was unique because of the severe blood loss episodes that required transfusion, without preoperative presence of a visible nasal haemorrhagic tumor[10].

The localization of a possible haemangioma in the nasal cavity requires a nasal rigid endoscopy in a case of posterior bleeding, haemoptysis or haematemesis because of the relevant information[11]. In our case, the nasal endoscopy was not possible before the operation because of the repeated episodes of anterior and posterior bleeding. The trans-nasal endoscopic approach is the technique of choice for cauterization in case of a posterior repetitive epistaxis and also for a good resection of a possible nasal haemangioma[8, 12].

In our patient, the nasal endoscopic approach has proven to be a fast and reliable technique, with a perfect control of bleeding and complete removal of an unknown haemorrhagic tumor.

CONCLUSIONS

Cavernous haemangioma is a rare benign tumor of the nasal cavity. This may lead to a severe epistaxis for a first presentation, so otolaryngologists must have in mind this possible diagnostic for an adequate surgical treatment. Rigid nasal endoscopy is the "gold standard" tool in all such cases of severe epistaxis and anaemia with or without haemoptysis and haematemesis.

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