



CAVENOUS HEMANGIOMA OF NASOPHARYNX - CASE REPORT

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Introduction

Hemangiomas in the head and neck area are quite common, but there are relative scarcity of cases in nasal cavity and nasopharynx. Hemangiomas can be classified into capillary, cavernous, and mixed type. Cavernous hemangioma usually presents unilateral bleeding and manifests of slowly growing mass coated with necrotic tissue on the surface. The mean age at diagnosis is 40 years, and there is no gender difference. Cavernous hemangioma of the nasopharynx is rare. This kind of tumor can be excised via endoscopy without major sequelae when limiting in the nasopharynx.

Case Report

We report a 35 years old male suffering from blood-tinged sputum and nasal secretion for several days. This man didn't have other systemic diseases and denied recent nasal trauma, upper respiratory tract infection or illicit drugs inhalation. He visited a local clinic, where found out a nasopharyngeal lesion. He was referred to our department for further management. Fiberscopy displays a bluish lesion at right roof of nasopharynx without invading Rosenmuller's Fossa., physical examination doesn't exhibit neck lymphadenopathy. Computer tomography with contrast reveals a slight enhanced tumor without obvious supplying vessels or bony erosion (Figure 1). We performed endoscopic excision of the tumor with minimal bleeding. Postoperative recovery is well without recurrent bleeding.

Under 40 times power field (Figure 2) , the specimen contains columnar epithelium, the stroma is rich in lymphocytes; glandular tissues with pseudostratified epithelium are visible, hinting this lesion being respiratory tract originated. The tumor contains large diameter vessels, the lumen is filled with fresh red blood cell and old blood clot depositing with collagen matrix. Fibrovascular bundles separate these lumens, that are intricate in appearance and fuse together eventually. These vessels are identified as vein due to lack of smooth muscle in lumen wall. Under 100 times high power field (Figure 3), the fibrostroma contains fibroblasts and fibrin; old blood clot deposit with fibroblasts to form thrombus; The above features is consistent with the diagnosis of cavernous hemangioma.

Discussion

More than half of hemangiomas appear on head and neck tissues, such as the skin, mucosa, and even in deeper portion (bones, muscles). According to Batsakis et al. report, 80% intra-nasal hemangiomas derive from nasal septum (Little's area), while the remains locate at the lateral nasal wall (1,2).

There are three histologic classification: cavernous, capillary, and mixed type (1). Capillary hemangioma is mainly composed of clustered capillary vessels separated by collagen-fibro matrix. Cavernous hemangioma is formed by large lumen veins.

Most intranasal hemangiomas appear on the anterior part of the nasal septum, and capillary type is dominate. Hemangiomas may be affected by progesterone. So most prepubescent patients are male; during the period from adolescence to middle age, women account for the majority (2). Intranasal cavernous hemangioma is uncommon, which mainly locates at the lateral nasal wall. There is no gender difference. Most patients are middle-aged and may have a history of previous nasal injuries (3,4).

The most encountering symptom is epistaxis. Nasal obstruction can evolve when tumor keeps on growing. Computed tomography with contrast can help to evaluate tumor extension because hemangiomas could lead to bony invasion.

Surgical resection is the mainstay of treatment. When encountering large tumor, pre-operative embolization is considered (5,6). Other treatment choices include injection of sclerosing agent,

cryotherapy, and laser therapy (7). According to literature, intranasal and nasopharyngeal tumors can be excised completely by endoscopic surgery (8).

Reference

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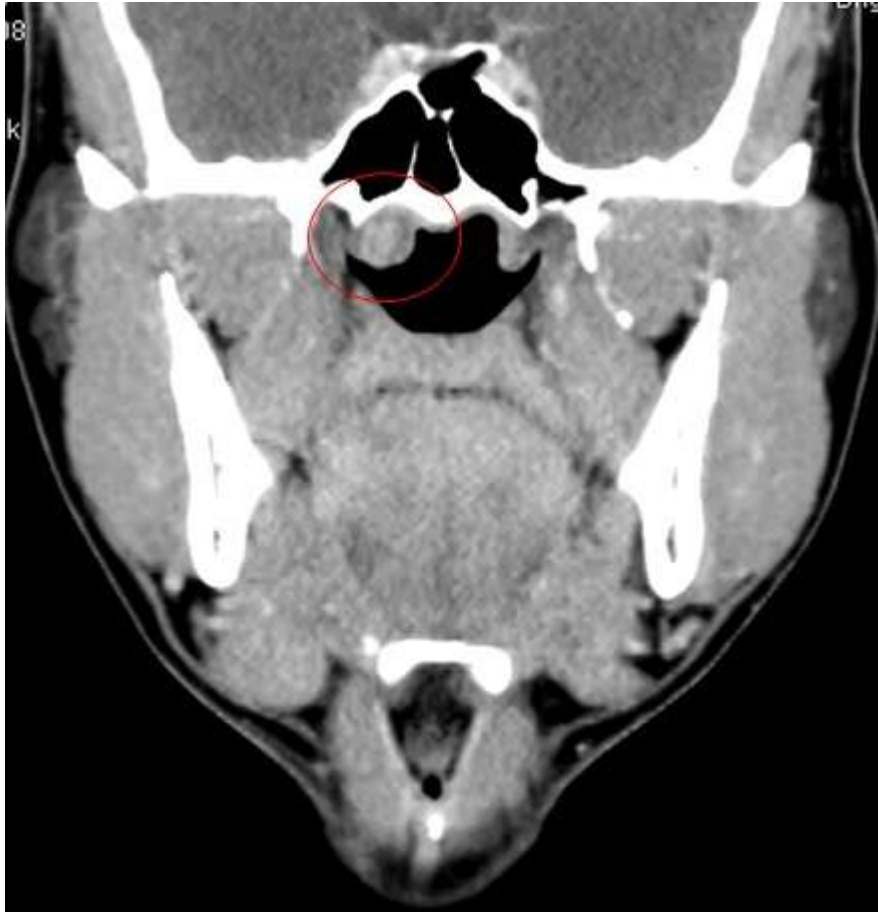


Figure 1. A mild enhanced lesion locates at right roof of nasopharynx without bony decay (red circle)

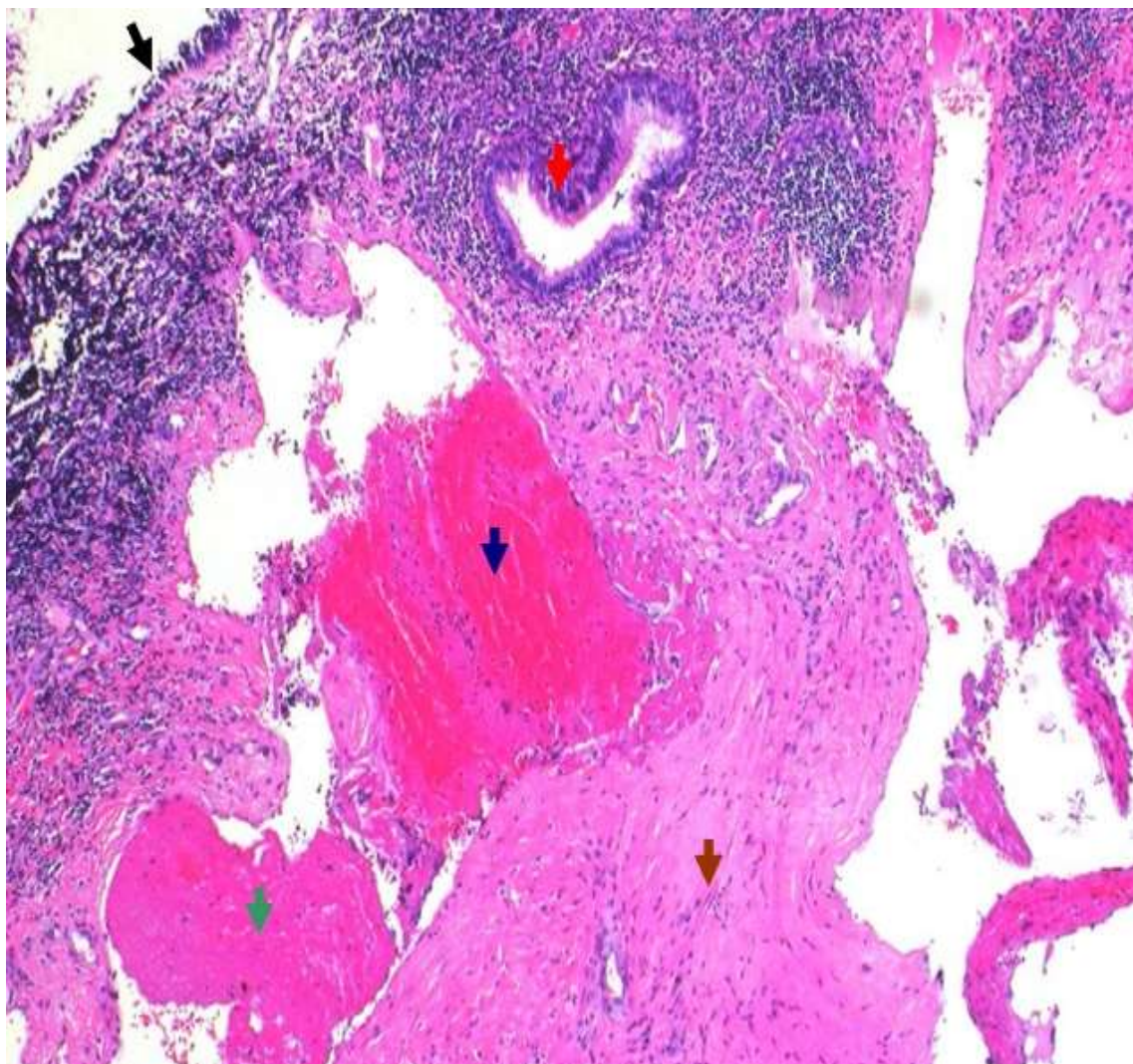


Figure 2. The specimen is covered by columnar epithelium (black arrow), and there are gland tissues lined with pseudostratified epithelium (red arrow); the above features confirm this lesion is respiratory tract originated. Large lumen vessel contains fresh red blood cell (blue arrow) and old blood clot depositing with collagen matrix (green arrow) is visible. These vessels are identified as veins due to lack of smooth muscle in lumen wall. The lumens are intricate in appearance and separated by fibrovascular bundles (brown arrow). (HE X 40)

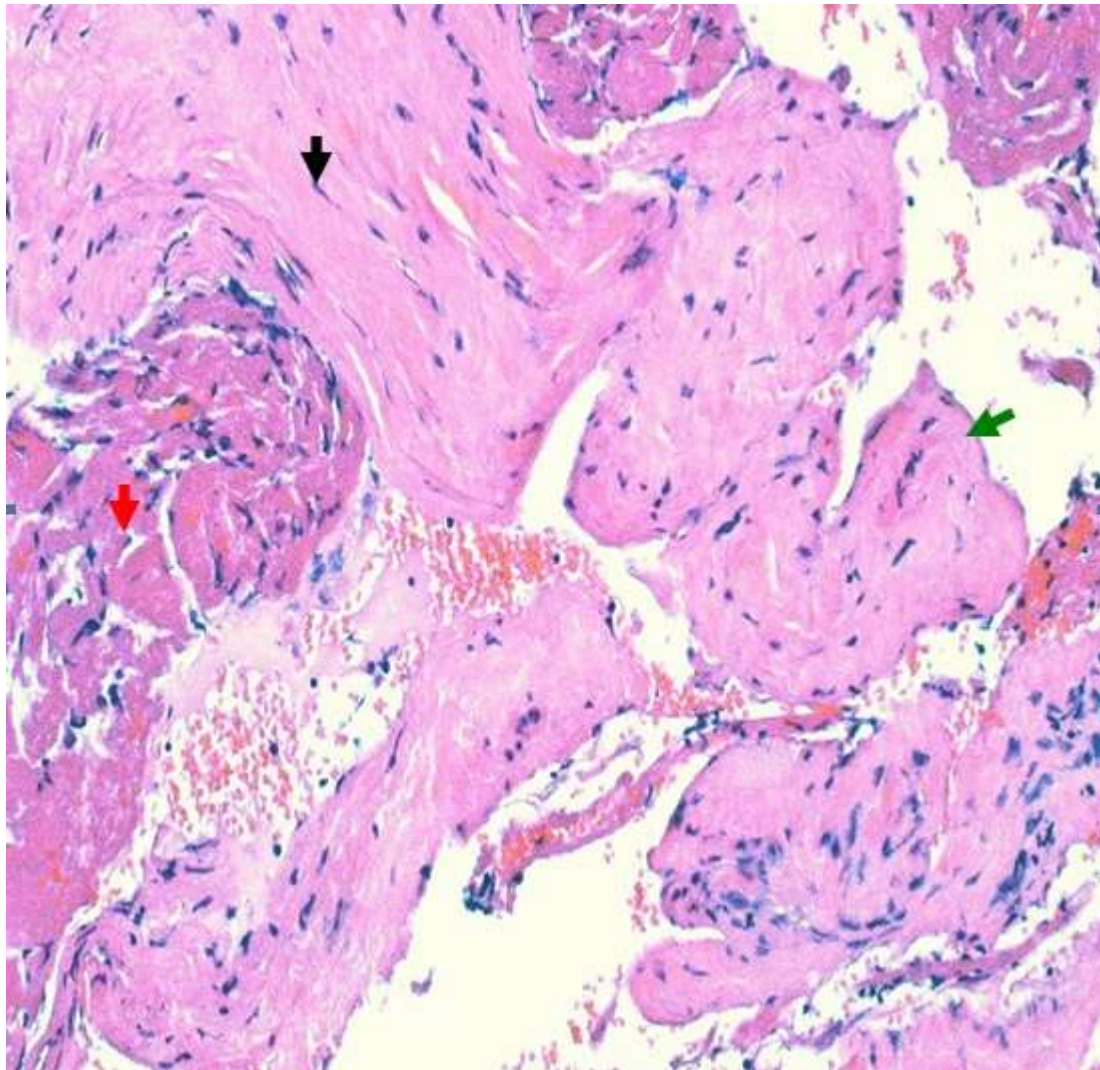


Figure 3. Vessel lumen is lined with continuous endothelial cell (green arrow). Interluminal fibrostroma contains fibroblasts and fibrin (black arrow); old blood clot deposit with fibroblasts to form thrombus (red arrow). (HE 100X)