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Case Report

Intranasal Glomus Tumor–A Case Report

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Abstract

A thirty five years old man, reported at ENT Department SZMC, Bogra, and sent to private laboratory in Rajshahi July 2009 with 6 month history of left sided nasal obstruction, pain and intermittent epistaxis. Physical examination revealed a large polyp-like mass protruding from left nose. Histopathology revealed the picture of glomus tumor.

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Introduction

The glomus tumor is a distinctive neoplasm which arises from modified smooth muscle cells of the normal glomus body. The glomus body is a specialized form of arteriovenous anastomosis which is involved in temparature reglulation. Glomus tumors are commonly located in the subungual region of finger. Other sites include palm, wrist, forearm and foot. Rarely the tumor occurs in the gastrointestinal tract (stomach, small intestine and colon) trachea lungs, mesentry, bone, vagina and cervix.

A glomus tumor is rare in nasal cavity. Almost all cases of nasal glomus tumor are benign and usually cured by complete excision. Genuine glomus tumor at the nasal cavity typically presents with nasal obstruction, pain and epistaxis. Here we report a new case of intranasal glomus tumor and describe the characteristics of this uncommon neoplasm.

Case Report

A 35 year old man presented with a 6 month history of left sided nasal obstruction, pain and intermittent epistaxis. He came to Rajshahi Private Laboratory for proper treatment. Physical examination revealed a large polyp-like mass protruding from left nasal cavity. It bleeds easily on touch. On gross examination a large reddish mass arising from the superior aspect at the left nasal septum. Pathological examination revealed a well-circumscribed submucosal lesion composed of a network of vascular spaces surrounded by sheets of round to oval tumor cells. The tumor cells had pale eosinophilic cytoplasm and plump nuclei (**Fig 1**). No nuclear atypia was identified.

The histologic features led to the diagnosis of a glomus tumor.

The patient was discharged 5 days after the operation. He received regular follow-up for recurrence after surgery.

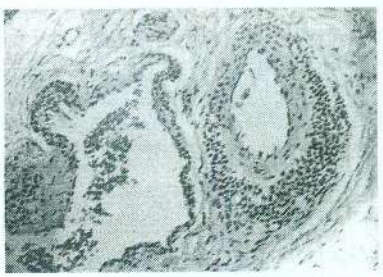

Fig. 1: Glomus tumor

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Discussion

Glomus tumor is a distinctive benign neoplasm. Histologically it resembles the normal glomus body, a specialized form of dermal arteriovenous anastomosis that provides thermal regulations. Glomus tumor is most frequently found in the subungnal region of the fingers and the distal extremities (1). Rarely this lesion may develop in the anatomical sites where glomus bodies are sparse or absent such as the stomach, bone, colon, nose and other sites(1).

Intra-nasal lesions tend to presence as dark-red to purple polypoid mass arises from nasal septum, turbinates or less frequently the ethmoid sinus(2). The presenting symptoms are nasal obstruction, epistaxis, nasal and facial pain. Some intra-nasal glomus tumors are asymtomatic and are incidental findings on routine physical examination (3,4,5).

The gross appearance closely resembles other vascular tumors, such as angioleiomyoma, hemangioma and hemangiopericytoma (6). Due to possibility of massive bleeding, intranasal biopsy in the outpatient department should be avoided. Although extremely rare aggressive intranasal glomus tumors (6,7) and malignant glomus tumors arising from the nasal cavity (8) have been reported.

Microscopically the tumor cells, referred to as glomus cells, surround small vessels in a manner resembling the normal glomus body. Glomus cells are believed to be derived from modified smooth muscle cells which can be shown by positive immunohistochemical staining for actin and vimentin but negative for cytokeratin, chromogranin, EMA and S-100.

They are typically uniform, large, spherical cells with a clear or eosinophilic granular-staining cytoplasm and centrally located round nuclei. Cellular atypia is not seen in these cells (9).

In summary, we report here a patient with intranasal glomus tumor, which is extremely rare. Despite the rarity, clinician has to bear in mind the differential diagnosis of intranasal polyp especially when pain or epistaxis is present.

Another distinct entity, paraganglioma is often described as a glomus tumor and should be distinguised from it. The glomus tumor may be misdiagnosed as haemangioma or haemagiopericytoma histopathologically but it should be confirmed by immunohischemistry.

All most all sinonasal glomus tumors are benign and can be cured by complete excision. Although extremely uncommon an aggressive tumor or malignant changes could develop and local recurrence or distant metastasis may ensure.

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