



ANGIOLEIOMYOMA OF NASAL CAVITY

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ABSTRACT Angioleiomyoma or vascular leiomyoma is a rare benign tumor formed by smooth muscle cells in the vascular wall or by remnants of embryonic tissue, commonly found in the uterus (95%), skin (3%), and gastrointestinal tract (1.5%). Less than 1% of all vascular leiomyomas occur in the nasal cavity. The origin of angioleiomyoma of the nasal cavity is uncertain, partly due to the scarcity of smooth muscle in the nasal cavity. Three hypotheses have been proposed for the origin of smooth muscle tumors in the nasal cavity: from aberrant undifferentiated mesenchymal cells; from elements of smooth muscle in the walls of blood vessels and of piloerector muscles; or from both previous hypotheses, simultaneously. Some articles indicate that sexual hormones and Epstein-Barr virus infection can affect the genesis of nasal angioleiomyoma. The literature shows a prevalence of angioleiomyomas of the nasal cavity in female patients (in a 2:1 ratio between females and males) between the fourth and sixth decades of life, and affecting mainly the inferior nasal conchae. These angioleiomyomas develop in the mucosa of the nasal cavity as single solid small cutaneous masses. They can be painful or not and can expand. They usually manifest as epistaxis (56.25%) and with nasal obstruction (56.25%). In this report, we present the case of a 43-year-old man with a diagnosis of angioleiomyoma of the nasal cavity.

KEYWORDS :

INTRODUCTION:

- Most of the sinonasal tumours are of epithelial origin. Leiomyomas are very uncommon in the upper respiratory tract and extremely rare in the nasal cavity and paranasal sinuses.
- They account for less than 2.5% of the mesenchymal neoplasms of the sinonasal tract and the nasopharynx.
- Benign tumours usually presenting as a painless mass. Thought to arise from smooth muscle cells.
- Common in GIT, female genital tract.
- Rarity in the nose and PNS- lack of smooth muscle.

CASE REPORT:

- 43-year-old male patient presented to our ENT OPD with complaints of bleeding from left nostril for one n half years On and off, profuse about 50 ml each episode,begins spontaneously and stops spontaneously
- Patient also had history of nose block on the left for 1 1/2 years
- There was no history of previous trauma to the nose
- No h/o headache, vomiting, recurrent clearing of throat, recurrent sneezing, dust allergy.
- No h/o ear block.
- Newly diagnosed diabetic
- On Anterior rhinoscopy , pale pinkish mass seen in the left nostril

EXAMINATION:

1.DIAGNOSTIC NASAL ENDOSCOPY:



FIGURE 1
A pinkish friable mass seen in the left nasal cavity probably arising from the roof or septum which bleeds on touch.



2.CT-Paranasal sinuses:
SOFT TISSUE MASS IN THE LEFT NOSTRIL ALONG THE DEVIATED SPETUM



FIGURE 2



FIGURE 3
Nasal conchae and osteomeatal complexes are normal

3. SURGICAL PROCEDURE :

Endoscopic excision biopsy done

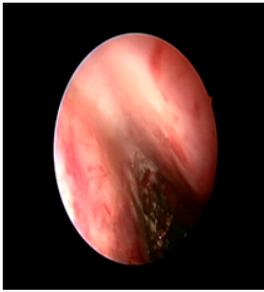


FIGURE 4
CRIBRIFORM PLATE SHOWS NO ATTACHMENT OF MASS

4. HISTOPATHOLOGY:

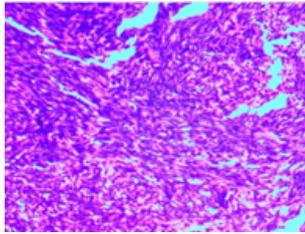


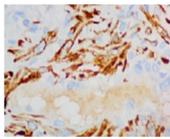
FIGURE 5
Solitary fibrous tumor

4. FOLLOW UP:
1 WEEK POST OP

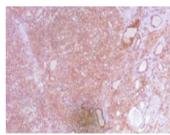


FIGURE 6
1. Crusting present 2. No recurrence till date

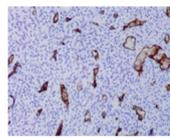
5. IMMUNOHISTOCHEMISTRY:



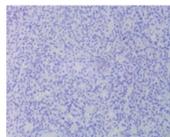
DESMIN- POSITIVE
VESSEL WALLS



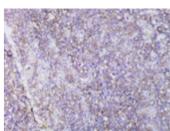
H-CALDESMON-POSITIVE



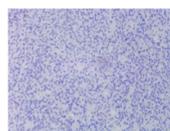
CD34-POSITIVE IN BLOOD



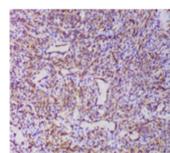
NSE-NEGATIVE
NEGATIVE



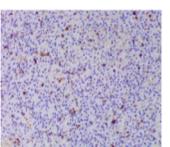
CD99-POSITIVE



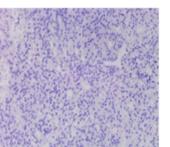
MYOGENIN-



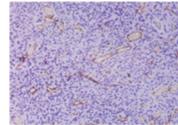
SMA-POSITIVE



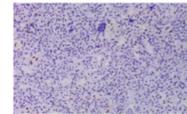
CD45-POSITIVE



PanCK-NEGATIVE



CD31



FLI-1

THIS IS SUGGESTIVE OF ANGIOLEIOMYOMA

DISCUSSION:

Sinonasal angioleiomyomas make up less than 1% of leiomyomas in the body. Roughly 10% of these tumors are located in the head and neck region and presenting sites include the nose, auricle, lips, and neck. Typical presenting symptoms may include nasal obstruction, epistaxis, facial pain, recurrent sinusitis, and can be associated with a septal deviation. Angioleiomyoma is not often included in the clinician's differential diagnosis of an obstructive nasal mass. The differential diagnosis includes both benign and malignant tumors of the nasal cavity including inverted papilloma, nasal angiofibroma, hemangioma, hemangiopericytoma, solitary fibrous tumor, desmoid fibromatosis, peripheral nerve sheath tumors, and sinonasal sarcomas including leiomyosarcoma and rhabdomyosarcoma.

The rare nature of these tumors is attributed to the paucity of smooth muscle tissue in the region. Smooth muscle in the nasal cavity is present in blood vessel walls as well as the piloreceptor muscles of the anterior vestibule. Angioleiomyoma of the nasal cavity appears to present more commonly on the turbinates and nasal vestibule presumably due to the presence of smooth muscle.

Computed tomography (CT) and magnetic resonance do not conclude the diagnosis. Cytologic examination does not provide a conclusive diagnosis. Surgical excision with histologic examination is the only way to make a definite diagnosis. In addition to that, conventional light microscopy studies for the identification of angioleiomyoma after staining with hematoxylin-eosin can be performed using special staining, such as Masson trichrome stain, or immunohistochemical markers such as smooth muscle actin, desmin, myoglobin, S-100 protein, and vimentin. The absence of atypias is the most important histologic indication of benignity. The treatment of choice is total lesion excision. Recurrence is extremely rare after total excision.

CONCLUSION:

- Angioleiomyoma of the nasal cavity is a rare and challenging clinical diagnosis that requires detailed histopathologic examination. The differential diagnosis includes a variety of epithelial and mesenchymal derived tumors.
- Surgical excision with histologic examination is the only way to make a definite diagnosis. Excision is better than punch biopsy in cases like these.
- Follow up immunohistochemistry required to obtain exact diagnosis.

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