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SPINDLE CELL TUMOUR AS NASAL MASS -A RARE CASE REPORT

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ABSTRACT

We report a rare case of a spindle cell tumor presenting as a nasal mass. Spindle cell tumors are rare, mesenchymal or epithelial tissue-originating neoplasms, typically affecting the skin, subcutaneous soft tissues, calcaneus, and breast. Nasal involvement is exceedingly rare. Our patient presented with a nasal mass, and radiology aided in detection. However, the tumor's nature remained unclear until surgical excision. This case highlights the diagnostic challenges and importance of considering spindle cell tumors in the differential diagnosis of nasal masses.

Keywords: Spindle cell tumor, nasal mass, rare case report, diagnostic challenges.

INTRODUCTION:

Rare tumors known as spindle cell tumors were initially described by Weiss and Enzinger in 1896.[1] Tumors with spindle cell characteristics can have a long or short spindle shape and vary in length.[2] Tumors tend to originate from mesenchymal or epithelial tissues and are most commonly found in the skin, subcutaneous soft tissues, calcaneus, and breast.[3,4]

Environmental and genetic factors may contribute to the development of spindle cell tumors while the exact cause is unknown. The dermis and subcutis of the distal extremities are mainly affected by the spindle cell tumors, and nasal cavity is rarely affected. Symptoms depend on the size and position of the tumor. When the nasal spindle cell tumors reach a certain size, they present the symptoms according to the involved site, and the nature of the tumor cannot be defined precisely before the surgery. The location and boundaries of the tumors can be detected using radiology. As per the radiological findings a surgical approach may be planned preoperatively. Differential diagnosis and treatment strategies can be made with the help of histopathology.[5]

CASE REPORT:

A 30-year-old female presented to Ent OPD with swelling right nasomaxillary groove and nasal obstruction for 5 months.

Anterior rhinoscopy revealed a mass completely blocking nasal cavity. Oral cavity and oropharynx examination was normal with no significant lymphadenopathy. (figure 1)



Figure 1- Pre operative clinical appearance

A non contrast enhanced computed tomography scan (NCCT) of nose and paranasal sinuses was

performed to know extent and characteristics of lesion. On NCCT soft tissue density mass of size approximately 4 cm into 3 cm was seen in right nasal cavity. (figure 2a,2b)



Figure 2a,2b-NCCT Nose and paranasal sinuses

Patient underwent endoscopic excision of mass under general anaesthesia.

Mass was approximately 4 cm into 3 cm, polyploidal in nature with greyish brown to whitish in colour attached to right nasal septum.(figure 3)



Figure 3 Gross tumour appearance

Post operative histopathological findings show interlacing fascicles of benign appearing spindle cells that have ovoid to spindle shaped nuclei with blunt ends; suggestive of benign spindle cell lesion.

Routine follow up after 1 month showed no recurrence.

DISCUSSION:

These are a class of tumors distinguished histologically by a combination of spindle cells and fibroblasts within a collagen and mucinous matrix. Furthermore, these tumors are uncommon and can develop in soft tissues, bones, or any other part of the human body. For example, they can appear as spindle cell carcinoma or squamous cell carcinoma in epithelial tissues, or they can manifest as spindle cell sarcoma or stromal sarcoma in mesenchymal tissue. Consequently, based on their morphological appearance, they may be a tumor or a carcinoma.[6]

Based on the location and size of the tumor the spindle cell tumors primarily present as nonspecific olfactory disorders, localized pain, and progressive unilateral nasal congestion, nasal obstruction and bulging, which are based on the location and size of the tumor. The tumor's considerable size and its tendency to compress surrounding tissue may mimic malignant features.[7]

The category of spindle cell tumors include a wide range of both benign and malignant tumors, originally from neural, fibroblastic, vascular, myofibroblastic, myogenic, and epithelial tissues. The following histological patterns can be seen in head and neck tumors made primarily of spindle cells: monomorphic, biphasic, pleomorphic Malignant Fibrous Histiocytoma or myxoid.[8]

In order to classify the differential diagnosis of these lesions and enable more focused application of molecular and immunohistochemical techniques, histopathology is important. A broader panel of antibodies is said to help narrow down the immunohistochemical diagnosis; however, financial constraints limit the number of antibodies that can be tested in each case.[9]

CONCLUSION:

We are reporting a rare case of nasal spindle cell lesion. Because nasal spindle cell tumors are uncommon, more cases must be reported before a prognosis can be established. Immunohisto-chemistry is necessary for accurate diagnosis. Endoscopics nasal resection of spindle cell tumors is a safe and efficient procedure.[7]

DECLARATION: The authors have no competing interests to declare that are relevant to the context of this article. The authors have no relevant financial or non-financial interests to disclose.

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