Neurilemmomas (Schwannomas) are common neurogenic tumor in the peripheral nervous system. Only a few cases have been reported in the sinonasal cavities. We present a 40-year-old female with neurilemmoma arising from the nasal septum. When encountering a benign tumor in the nasal cavity, we should keep this possibility in mind in the differential diagnosis.

Key words: Neurilemmoma, Schwannoma, Nasal septum

CASE REPORT

A 40-year-old female suffered from nasal obstruction for 15 years. She denied having nasal discharge, nasal pain and headache but epistaxis. After admission, endoscopic examination showed a 6x5cm bulging, hypervascular mass lesion at the posterior two thirds of the nasal septum. The remainder of her head and neck examination was unremarkable.

Computed tomography (CT) showed a well-demarcated soft tissue mass without calcification or obvious necrosis in the nasal cavity in pre-contrast study. The center of the tumor located clearly in the nasal septum. The medial walls of bilateral maxillary sinuses were eroded. The tumor showed inhomogeneous enhancement after IV contrast administration (Fig. 1, 2). There was no evidence of bone destruction or intracranial extension. Benign tumor was our impression due to its slow growing behavior and lack of aggressive appearance on imaging study. The patient underwent Denker’s operation with complete tumor resection.

Histological examination revealed the tumor was sharply circumscribed and encapsulated. The spindle-shaped cells had oval pleomorphic nuclei. No mitotic figures were observed. The cellular pattern varied from nuclear palisades (Antoni A) to a disorganized array of nuclei (Antoni B) (Fig. 3, 4). The final diagnosis was neurilemmoma arising from the nasal septum.

DISCUSSION

The most common neurogenic tumors are neurilemm-
Neurilemmoma and neurofibroma. Clinically, neurilemmomas are often solitary, located in the extremities with tenderness while neurofibromas may be multiple (von Recklinghausen’s disease), are frequently centrally located, and are usually nontender. Malignant change is more common in neurofibroma than in neurilemmoma [1, 2].

Neurilemmoma is rare in the nasal cavity. Depending on the location and size, the tumor may present with a variety of signs and symptoms, including nasal obstruction, epistaxis, rhinorrhea, anosmia, facial swelling, headache and serous otitis media [2].

Microscopically, neurilemmoma can be of two major histological types: Antoni A, characterized by a compact arrangement of elongated spindled cells, or Antoni B, characterized by a loose myxoid stroma with few spindled cells [2]. This variation is reflected on the CT appearance, which ranges from a variably enhancing homogeneous ovoid mass to a primarily cystic lesion [3, 4, 5]. Surrounding bony erosion is more common in large neurilemmomas [3]. The CT scan findings in our patient revealed that some foci has hyper-density to muscle, another iso-density to muscle and the other hypo-density to muscle in post-contrast study.

The differential diagnosis of the nasal tumors might include lymphoma, inverted papilloma, intranasal extension of juvenile angiofibroma, meningioma, neurofibroma, neurilemmoma, enchondroma, septal dermoid, idiopathic midline granuloma, squamous cell carcinoma, chondrosarcoma, esthesioneuroblastoma, and malignant neurilemmoma [4, 5, 6]. In general, the clinical presentation and imaging characteristics of a nasal or paranasal neurilemmoma are indistinguishable from any other tumor in this region. However, certain CT patterns may be useful in the differential diagnosis. For instance, juvenile nasopharyngeal angiofibroma usually is a hyperdense mass centered in the posterior nares with a tongue of tissue extending through the sphenopalatine foramen into the pterygopalatine foramen. Inverted papilloma is an enhancing mass on the lateral wall of the nose with its center in the hiatus semilunaris region and displacement of

Figure 1. Axial pre-contrast a. and post-contrast enhanced b. CT scan showed a well-demarcated, inhomogeneous enhancing soft tissue mass in the nasal cavity. The center of the tumor located clearly in the nasal septum. The medial walls of bilateral maxillary sinuses were eroded.

Figure 2. Coronal post-contrast enhanced CT scan showed inhomogeneous enhancing soft tissue mass occupying the nasal cavity with erosion of the medial walls of bilateral maxillary sinuses.
the nasal septum toward the contralateral side. In malignant nasal tumors, esthesioneuroblastoma is a moderate enhancing mass centered in the cephalad nasal cavity with associated cribriform plate and sinus wall destruction.

Although specific diagnosis from imaging study is difficult, CT scan with contrast medium is helpful in evaluating the origin, localization of the tumor and involvement of vital structures (i.e. skull base, orbit, carotid artery) around the lesion [3, 4].

In summary, neurilemmoma arising from the nasal septum is very rare and the correct diagnosis is usually made only when histological sections are studied. CT scan with contrast medium is helpful in evaluating the origin, localization and extension of the lesion. The possibility of neurilemmoma should be kept in mind when facing a soft tissue mass in nasal cavity.

**REFERENCES**


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**Figure 3.** Photomicrography of hematoxylin-eosin-stained sections of neurilemmoma. The cellular pattern varied from nuclear palisades (Antoni A)(compact area) to a disorganized array of nuclei (Antoni B)(myxoid area).

**Figure 4.** Spindle-shaped cells with oval nuclei in palisading pattern (Antoni A) was noted.
鼻中隔的神經鞘瘤：病例報告

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神經鞘瘤是一種常見的起源於周邊神經系統的良性腫瘤，而發生於鼻中隔卻很罕見。我們報導一罕見的鼻中隔的神經鞘瘤病例，病患是一位四十歲女性，臨床表現為鼻塞及流鼻血。頭部電腦斷層掃描顯示鼻腔內有異常軟組織佔據鼻腔並對兩側上頜竇的內側壁造成侵蝕。

病理切片對於正確診斷神經鞘瘤是必要的。而電腦斷層掃描影像對於腫瘤的來源、位置、及有無顱內侵犯之評估是有幫助的。當我們面對此類鼻腔中的良性腫瘤時，必須將神經鞘瘤列入鑑別診斷。

關鍵詞：神經鞘瘤，鼻中隔，鼻腔