Lipomas are the most common benign mesenchymal soft tissue neoplasms. They originate from mature adipose tissue and may arise in any location where fat is present. Lipomatous tumors account for 15–20% of the cases located in head and neck region [1]. The most common site of involvement is the posterior triangle of the neck. Nasopharyngeal manifestation is extremely rare with only a few reports described in the literature [2–6]. The authors present an unusual case of 50-year-old female with lipoma of nasopharynx with unspecific clinical symptoms (Dent. Med. Probl. 2011, 48, 4, 583–585).

Key words: lipoma, nasopharyngeal neoplasms.

Case Report

A 50-year-old female presented to the Otorhinolaryngology Department with a 3-year history of chronic, non-specific rhinitis and an increasing difficulty in breathing due to nasal obstruction. Clinical examination of nasal cavity showed a deviated septum. Evaluation of nasopharynx with flexible nasoendoscopy revealed presence of medium sized, round, non-painful and mobile tumor, covered by normal mucosa. The mass was arising from the right posterior wall of nasopharynx causing the obstruction of the choana on the right. Physical examination of oral cavity, larynx and neck was normal. A radiological examination – magnetic resonanse imaging (MRI) of the head showed a well-defined, uniform structure in the nasopharynx (Fig. 1).

Patient was treated by surgical approach. Septoplasty was performed in the first phase of the operation. Subsequently, the well encapsulated, smooth-surfaced, homogenous mass was resected in one piece. Macroscopically it was circumscripted, encapsulated and firm mass with a yellow greasy cut surface. The tumor size was 1.7 centimeters. Histopathologic examination confirmed a benign lipoma. Microscopically it consisted of mature adipocytes with large fat masses.
The patient had an uneventful recovery, with no breathing difficulty. There was no evidence of recurrence 8 months after surgery.

**Discussion**

Lipoma is one of the most common forms of benign neoplasm. In the head and neck, it arises mainly in the posterior cervrtriangle. Rarely it may occur in nasopharynx, which is connected with the paucity of adipose tissue in this area.

Lipomas occur more often in adults in the fifth and sixth decades with an equal gender distribution. However, some studies show that tumors located in the head and neck region more commonly affect males in their seventh decade [7].

Lipomas are non-painful, slow-growing and relatively asymptomatic lesions. They usually grow to a large size before are discovered. Nasopharyngeal involvement is not common. In described patient, lipoma was located at the junction of roof and posterior wall of nasopharynx. Kalan et al. [6] reported a case of lipoma in the fossa of Rosenmüller. Present patient complained of difficulty in breathing due to the obstruction of the nasopharynx and deviated septum. It is reported that with the progression of the disease fat necrosis and prominent hyalinization can be observed [8]. Durmaz et al. [9] reported a case of osteolipoma of the nasopharynx that caused destruction in the left half of the soft palate. Also the obstruction of the nasopharynx may lead to the Eustahian tube dysfunction and conductive hearing loss and to otitis media with effusion. Cases with some sensorineural hearing loss are also reported [3]. Most of lipomas do not cause symptoms until they reach a large size [10].

Diagnostic process begins with clinical examination. In described patient nasofiberoscopy revealed round, encapsulated nasopharyngeal mass with a smooth mucosal covering showed yellow through the mucosa. MRI showed presence of typical signal intensity lesion imitating subcutaneous fat. According to literature, CT is useful in the diagnosis of lipoma but MRI is preferable. MRI is capable of higher resolution in soft tissues. Lipomas, as a soft tissue neoplasm of mature adipose tissue, produce strong signals on T1 and T2-weighted MR images and a weak signal on fat suppressed images. That indicates the presence of lipomatous tissue. MRI enables to distinctly determine the margin of a lipoma by the image of a “black rim”. This helps to distinguish lipomas from the surrounding adipose tissue. CT provide images of homogeneous mass with few septations without contrast enhancement [7]. Neither MRI nor CT scans can provide distinction between lipoma and liposarcoma.

The histologic features of classic lipomas are similar. They are usually composed of encapsulated, mature adipose cell with adipocytes without cytologic atypia. There are several others histologic variants according to the tissue present, including spindle-cell lipoma, fibrolipoma, myxolipoma, myolipoma, angiolipoma, osteolipoma, pleomorphic lipoma and chondroid lipoma.

**Conclusions**

Despite the fact that nasopharyngeal lipomas are extremely rare benign lesions they should be taken into consideration in the differential diagnosis of progressive nasal obstruction, rhinorhea and presence of nasopharyngeal mass.
References


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