

Retropharyngeal Space Lipoma: Case Report and Bibliographic Review

Felippu, A; Murta, AA; Cóser Neto, RE; Rodrigues, AB; Patrício, HC; Rotella, LA; Almeida, GC

Introduction

Lipomas are common benign lesions of mesenchymal origin that generally present as encapsulated subcutaneous or submucosal masses in the surface of soft tissue. Among 15% of lipomas present in the head and neck, and the most common affected region is the posterior triangle of the neck. Nevertheless, other regions can also be affected¹.

Lipomas presenting in the retropharyngeal space are very rare. Less than 40 cases have been referred in medical's literature.²

The retropharyngeal space extends from the skull base, between the middle and deep layers of the deep cervical fascia, in the posterior midline of the pharynx, to the level of T2 to T6, where these two layers of fascia fuse. Normally this space is fulfilled by fat tissue and by two longitudinal chains of lymphnodes in the suprahyoid portion.³

Neoplasms in the retropharyngeal space remain asymptomatic until they reach a critical size, resulting in severe symptoms such as dysphagia and obstructive sleep apnea (OSA).⁴

Most of related references available refer to major tumors, with more pronounced symptoms and, when surgery was the treatment of choice, larger surgeries were performed.^{5,6}

We present a case of a patient whose main symptoms were related to a chronic rhinosinuites associated to an unexpected mass in rhinopharynx.

Material and Methods

A 46 year-old female patient came to consultation referring frontal/maxillary headache, progressive nasal obstruction, night cough, and posterior discharge. The symptoms began about 6 months before, and they became worse from 4 to 5 weeks earlier.

In her personal medical history her mother was treated for a Nasopharyngeal Lymphoepithelioma and nothing else relevant besides been a smoker.

The patient had undergone three treatments for an Acute Rhinosinuites in another medical service. After no relief of symptoms, she underwent a CT Scan, which showed opacification of the right maxillary sinus, a deviated nasal septum, a bullous middle turbinate and an unusual mass at the rhinopharynx.(Fig. 2). A surgical procedure was suggested.

A fibronasopharyngoscopy was made and an unusual mass was seen at the rhinopharynx.(Fig. 1)

At this point she came to our service. We chose to proceed with an endoscopic endonasal surgery, with transoperatory cryobiopsy. The pathological analysis during the surgical procedure confirmed fat tissue of mesenchymal origin with no cellular atypia. The lesion was almost totally resected by endoscopic endonasal approach, and a small portion of the tumor in the oralpharynx was resected by transoral approach.

Septoplasty, bilateral inferior turbinoplasty, medium turbinectomy of the bullous middle turbinate and a maxillary antrostomy in affected sinus has been performed and only inflammatory mucosa and a retention cyst were found.

The final laboratory's analysis reconfirmed the same transoperatory result.

Results

The patient is totally free of those symptoms that had motivated her to seek for medical help, the headache is gone, and her nasal breathing is better than ever.

Conclusion

Although the pathology described is very rare, this is one more reported case. Nowadays more and more imaging resources available are being used. We believe that diagnosed cases of retropharyngeal space lipomas may rise.

As far as we know, this is the first case which a minimally invasive surgery has been performed as treatment, with endoscopic endonasal approach combined with the transoral approach, providing not only the cure and complete relief of symptoms of the patient, but a shorter postoperative hospital care.

References

1. Akhtar J, Shaykhon M, Crocker J, D'Souza AR. Retropharyngeal lipoma causing dysphagia. *Eur Arch Otorhinolaryngol*. 2001 Nov;258(9):458-9.
2. Senchenkov A, Wernig JW, Staren ED. Radiographic assessment of the infiltrating retropharyngeal lipoma. *Otolaryngol Head Neck Surg*. 2001 Dec;125(6):658-60.
3. Davis WL, Hamzberger HR, Smoker WR, Watanabe AS. Retropharyngeal space: evaluation of normal anatomy and diseases with CT and MR imaging. *Radiology*. 1990 Jan;174(1):59-64.
4. Aland JW, Jr. Retropharyngeal lipoma causing symptoms of obstructive sleep apnea. *Otolaryngol Head Neck Surg*. 1996 Apr;114(4):628-30.
5. Eley JA, Carrero E, Vanuise F, Genden EM, Bederson JB, Sonn PM. A rare prevertebral ordinary lipoma presenting as obstructive sleep apnea: computed tomographic and magnetic resonance imaging findings. *Archives of otolaryngology—head & neck surgery*. 2008 Sep;134(9):1001-3.
6. Eisele DW, Landis GH. Retropharyngeal infiltrating lipoma—a case report. *Head & neck surgery*. 1988 Jul-Aug;10(6):416-21.
7. Hockstien NG, Anderson TA, Moonis G, Gustafson KS, Mirza N. Retropharyngeal lipoma causing obstructive sleep apnea: case report including five-year follow-up. *The Laryngoscope*. 2002 Sep;112(9):1603-5.
8. Ozawa H, Soma K, Ito M, Ogawa K. Liposarcoma of the retropharyngeal space: report of a case and review of literature. *Auris, nasus, larynx*. 2007 Sep;34(3):417-21.
9. Gong WX, Wang ET, Zhang BL. Retropharyngeal lipoma causing obstructive sleep apnea in a child. *Zhonghua er ke za zhi*. 2007 Jun;45(6):471.
10. Wong YK, Novotny GM. Retropharyngeal space - a review of anatomy, pathology, and clinical presentation. *The Journal of otolaryngology*. 1978 Dec;7(6):528-36.
11. Fu YS, Perzin KH. Non-epithelial tumors of the nasal cavity, paranasal sinuses and nasopharynx: a clinicopathologic study. VIII. Adipose tissue tumors (lipoma and liposarcoma). *Cancer*. 1977 Sep;40(3):1314-7.

Fig. 1 Fibronasopharyngoscopy

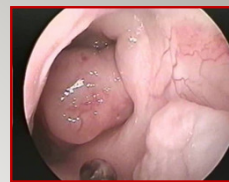


Fig 2. CT Pre Op.

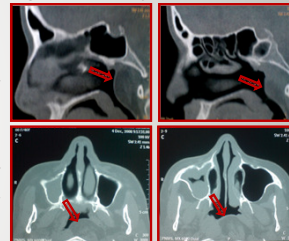


Fig. 3 CT Post Op.

