

Parapharyngeal Liposarcoma: A Rare Case Report and Review of the Literature



Jawad Hasnaoui*, Said Anajar, Reda Abada, Sami Rouadi, Mohammed Roubal and Mohammed Mahtar

ENT Department, Face and Neck Surgery, Hospital August, University Hospital Centre, Morocco

Submission: February 23, 2017; **Published:** March 09, 2017

***Corresponding author:** Jawad Hasnaoui, ENT Department, Face and Neck Surgery, Hospital August, 20'1953, University Hospital Centre IBN OCHD, 6, Street lahssen ELAARJOUN quartier des hopitaux, Casablanca, Morocco, Tel: 212675 601663; Email: jawad.hasnaoui86@gmail.com

Abstract

Liposarcomas rarely occur in the parapharyngeal space and only a few case reports exist. We report a case of a 31-year-old female with a liposarcoma arising in the parapharyngeal space. We removed the tumour surgically utilising a cervical approach. The histological diagnosis was well-differentiated liposarcoma. There is no recurrence after 6 month of follow up. The diagnosis of liposarcoma is based on clinical, radiological and histological arguments. CT and/or MRI evaluation of the head and neck is very important, although histological confirmation is critical. For curative therapy of liposarcoma, surgical excision remains the dominant modality. Although a wide surgical margin is important to prevent local recurrence, wide excision is often difficult in the head and neck region. The benefits of adjuvant therapy are still not proven. Long-term follow up will be necessary because delayed local recurrences are not rare.

Introduction

Parapharyngeal liposarcoma is a very rare malignant tumor that often causes nonspecific clinical symptoms, including progressive dysphagia, globus sensation and/or respiratory disturbances [1,2]. They usually occur in the lower extremities and retroperitoneum, and rarely occur in the head and neck region [2]. The parapharyngeal space is a very rare site for liposarcomas, and only a few case reports exist. We present a case of a 31-year-old female with a liposarcoma arising in the parapharyngeal space. Through our case, we describe the different steps that led to the diagnosis of liposarcoma, as well as a review of the literature.

Case Report

A 31-year-old north African woman presented with a 3-month history of swelling in the right side of his mouth and neck. He also complained of dysphagia, and odynophagia without any weight loss. On physical examination, he was found to have a bulging asymmetry of his right soft palate and tonsil. He also had a painful soft and smooth mass which was 7 cm in size under the right mandible with intact skin but no palpable adenopathy (Figure 1). The radiological examination (CT) revealed a low-density regular solid lesion on the posterior wall of the oropharynx and laryngopharynx, which descended to the thyroid cartilage and extended to the right parapharyngeal space and sternocleidomastoid muscle (Figure 2). The patient underwent transcervical excision. The submandibular gland was

removed and the posterior belly of digastric muscle was resected to improve access to the parapharyngeal space. Intra-operative inspection revealed a lobulated lipomatous mass which measured 7 x 7 x 5 cm (Figure 3). Pathological examination of the tumour revealed a well-differentiated liposarcoma. Facial nerve function was normal after surgery, and the patient had no recurrence after 6 months of follow up.



Figure 1: Swelling under the right mandible with intact skin.

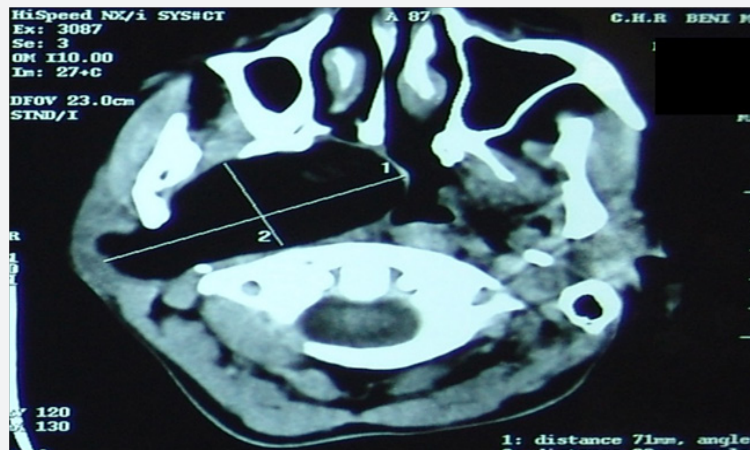


Figure 2: An axial image from the CT scan shows a large parapharyngeal mass of fat density measured 71 x 45 mm.

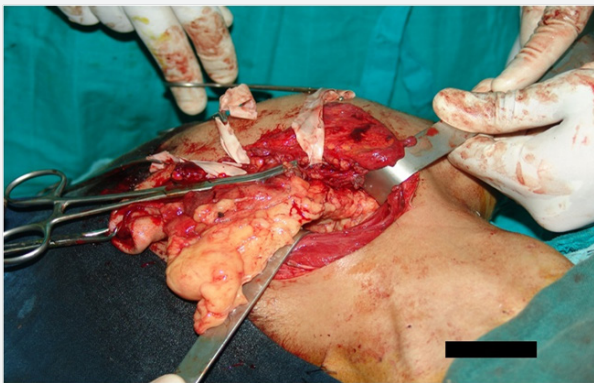


Figure 1: Intra-operative inspection revealed a lobulated lipomatous mass.

Discussion

Parapharyngeal liposarcomas are extremely rare, and only a few cases have been described in the literature. They are very slow-growing tumors and do not cause symptoms until they reach a large size [1,3]. They typically occur between the fourth and sixth decades of life and exhibit a male preponderance. Liposarcomas do not develop from lipomas but rather from primitive mesenchymal cells [4]. The mechanisms responsible for liposarcoma development are very complicated and are not fully understood. The most common symptoms include an abnormal sensation in the throat, noisy breathing, hoarseness, dyspnea, dysphagia and obstructive sleep apnea [5]. In our case, the first symptoms were dysphagia and odynophagia without dyspnea, which delayed the diagnosis. The reason for the consultation was the appearance of the mass which developed 2 months after appearance of the symptoms.

The diagnosis of liposarcoma is based on clinical, radiological and histological arguments. From the anatomical site and radiological findings of the tumour, we considered lymphangioma, salivary gland tumour, neurinoma and dermoid

cyst as principal differential diagnosis. CT and/or MRI evaluation of the head and neck is very important, although histological confirmation is critical. The CT and MRI findings indicated an adipose prominent solid mass with nodular or patchy non-adipose components, and these are consistent with liposarcoma [6]. To confirm the diagnosis of liposarcoma, a surgical removal of the tumour is usually necessary. The margin status of our case was microscopically clear. The patient had no recurrence after 6 months of follow up. Liposarcomas are considered radiosensitive tumors, although the efficacy of radiation therapy in patients with head and neck liposarcoma is controversial. In areas where wide local excision would be contraindicated given anatomic limitations, radiation may play a role in therapy for liposarcomas [7]. In our case, the margins of resection are clear, the benefits of adjuvant therapy after surgery are still not proven. We opted for long-term follow up will be necessary because delayed local recurrences are not rare.

Conclusion

We present a rare case of liposarcoma arising in the parapharyngeal space. Although wide local excision remains the mainstay for treatment for liposarcoma, taking a wide surgical margin is often difficult in the head and neck region. The benefits of adjuvant therapy are still not proven. Long-term follow up will be necessary because delayed local recurrences are not rare.

Conflict of Interest

All the authors have no personal or financial conflicts of interest regard this case report

Funding

No sources of funding to declare.

Consent

Written informed consent was obtained from the patient for publication of this case report and accompanying image.

References

1. Carrau RL, Myers EN, Johnson JT (1990) Management of tumors arising in the parapharyngeal space. *Laryngoscope* 100(6): 583-589.
2. Fagan JJ, Myers EN, Barnes L (1999) A parapharyngeal myxoid liposarcoma. *J Laryngol Otol* 113(2): 179-182.
3. Olsen KD (1994) Tumors and surgery of the parapharyngeal space. *Laryngoscope* 104(5 pt 2)(suppl 63): 1-28.
4. Pensak ML, Gluckman JL, Shumrick KA (1994) Parapharyngeal space tumors: an algorithm for evaluation and management. *Laryngoscope* 104(9): 1170-1173.
5. Lucas DR, Nascimento AG, Sanjay BK, Rock MG (1994) Well-differentiated liposarcoma. The Mayo Clinic experience with 58 cases. *Am J Clin Pathol* 102(5): 677-683.
6. McCulloch TM, Makielski KH, McNutt MA (1992) Head and neck liposarcoma: a histopathologic reevaluation of reported cases. *Arch Otolaryngol Head Neck Surg* 118(10): 1045-1049.
7. Rogers J, Patil Y, Strickland-Marmol L, Padhya T (2010) Lipomatous tumors of the parapharyngeal space: case series and literature review. *Arch Otolaryngol Head Neck Surg* 136(6): 621-624.



This work is licensed under Creative Commons Attribution 4.0 License
DOI: [10.19080/GJO.2017.05.555651](https://doi.org/10.19080/GJO.2017.05.555651)

Your next submission with Juniper Publishers will reach you the below assets

- Quality Editorial service
- Swift Peer Review
- Reprints availability
- E-prints Service
- Manuscript Podcast for convenient understanding
- Global attainment for your research
- Manuscript accessibility in different formats
(Pdf, E-pub, Full Text, Audio)
- Unceasing customer service

Track the below URL for one-step submission

<https://juniperpublishers.com/online-submission.php>