# Lipoma involving the masticator space



Anuradha Navaneetham, Arati Rao, Amul Gandhi, C. A. Jeevan HOSMAT Dental Implantology and Facial Esthetic Center, Bangalore, India

> Address for correspondence: Dr. Anuradha Navaneetham, HOSMAT Dental Implantology and Facial Esthetic Center, #45, Magrath Road, Bangalore - 560 025, India. E-mail: anufaxmax@gmail.com

# ABSTRACT

The lipoma is a common tumor of mesenchymal origin, usually seen on the trunk and lower limbs. In the head and neck region, it is usually seen in the posterior neck. It is rarely seen in the anterior neck, infratemporal fossa, oral cavity, pharynx, larynx and parotid gland. It may present in a variety of ways. We report a rare case of a lipoma involving the masticator space.

Keywords: Head and neck, lipoma, masticator space

## INTRODUCTION

A lipoma is a benign tumor consisting of adipocytes without atypia.<sup>[1]</sup> It is the most common tumor of mesenchymal origin that may occur in any region of the body where fat is present. It is most commonly seen on the trunk and lower limbs. In the head and neck, lipomas are rare, and account for 1–4.4% of all benign tumors.<sup>[2]</sup> They are usually seen in the posterior neck region.<sup>[3]</sup> They are slow growing and nearly always benign.

On clinical examination, lipomas are non-tender, soft, mobile masses. Most subcutaneous lipomas may be suspected with a high degree of accuracy on clinical examination. It is the deep seated or infiltrating lipoma that requires imaging for further assessment.<sup>[4]</sup>

We report a rare case of a lipoma involving the masticator space. A search of the PUBMED online database yielded only one other case report of a lipoma involving the masticator space.<sup>[5]</sup>

### **CASE REPORT**

A 40-year-old male patient reported to our unit with a complaint of a swelling on the left side of his face for a duration of 2 years. The swelling had gradually increased in size to reach a size of 5 cm x 5 cm at the time of examination. Local examination revealed an asymptomatic mass present at the left angle region of the mandible that was firm and non-fluctuant. The overlying skin was normal in color and texture. The swelling was more prominent with the teeth clenched and while contracting the masseter, and it extended from the posterior border of ramus toward the anterior border.

There was no intraoral extension of the swelling.

Ultrasonography report was suggestive of a lipoma. Magnetic resonance imaging (MRI) study showed a well-defined, oval-shaped, hyperintense signal in T1- and T2-weighted images involving the masticator space, adjacent to the masseter muscle and the superficial lobe of the parotid gland of the left side [Figure 1].

The tumor was excised under general anesthesia via an extraoral submandibular incision. Wide excision of the entire lesion was performed. The excised specimen appeared pale yellow in color with a lobulated surface [Figure 2]. Histologic examination showed the mass to consist of mature adipocytes separated by fibrous septae, and a diagnosis of lipoma was made [Figure 3]. There has been no recurrence in 2 years following surgery, and we continue to monitor the patient regularly.

### DISCUSSION

Lipomas are common tumors occurring in areas of the body where fat is present The fat in the tumors differs from normal fat in that it is never utilized for metabolic needs of the body.<sup>[6]</sup> These tumors are usually slow growing and asymptomatic unless



Figure 1: Magnetic resonance imaging showing the lesion in the left masticator space



Figure 3: Histopathology of the excised specimen showing lobules of mature adipocytes

they cause mass effect on the adjacent neurovascular structure. Benign lipomas are classified as classic lipoma, angiolipoma, chondroid lipoma, myxolipoma and spindle cell/pleomorphic lipoma.<sup>[2]</sup> Rarely, a lipoma may infiltrate the adjacent muscle and is called an infiltrating lipoma, which may be of two types; the common intermuscular variety and the rarer intramuscular form. Infiltrating lipomas have a high rate of recurrence. Lipomas are more common in males in the age group of 40–60 years.<sup>[7]</sup> Rarely, lipomas may be associated with inherited disorders such as Gardner's syndrome, Madelung's disease and hereditary multiple lipomatosis.

The superficial lipomas may be suspected with a high accuracy by clinical examination. The differential diagnosis of superficial lipoma includes Schwannoma, neurofibroma, vascular malformation, sebaceous cyst and lymphangioma. The deeper lipomas need to be assessed by means of imaging modalities such as MRI or computed tomography with appropriate contrast. Surgical excision of the lipoma is curative and recurrence is rare. However, infiltrating lipomas have a high recurrence rate, and the patients must be followed-up at regular intervals. In our case, the lipoma was present in the masticator space and did not



Figure 2: Excised specimen

involve the masseter muscle or the parotid gland. There have been many case reports of lipomas involving the submandibular and parapharyngeal spaces<sup>[8,9]</sup> and only one other reported case of lipoma of the masticatory space.

#### CONCLUSION

The lipoma is an extremely rare tumor of the head and neck region. We report a rare case of lipoma involving the masticator space. Surgical excision is curative but, depending on the histological subtype of the lipoma, regular follow-up is needed to identify recurrences.

#### REFERENCES

- Weiss SW. Histological Typing of Soft Tissue Tumors. 2<sup>nd</sup> ed. Berlin, Germany: Springer Verlag; 1994. p. 23.
- Fergnani ER, Pires FR, Falzoni R, Lopes MA, Vargas PA. Lipomas of the oral cavity: Clinical findings, histological classification and proliferative activity of 46 cases. Int J Oral Maxillofac Surg 2003;32:49-53.
- Barnes L. Tumors and tumor like lesions of the head and neck. In: Barnes L, editor. Surgical Pathology of the Head and Neck. 1<sup>st</sup> ed. New York: Dekker; 1985. p. 747-58.
- El-Monem MH, Gaafar AH, Magdy EA. Lipomas of the head and neck: Presentation variability and diagnostic work up. J Laryngol Otol 2006;120:47-55.
- Zhang F, Xie ZJ, Ge WL, Li SL, Li YN. Tensile force produced by a lipoma in the massetric space possibly causing hyperostosis of the angle of the mandible. Med Sci Monit 2009;15:CS148-50.
- Kumarswamy SV, Nanjappa M, Keerthi R, Singh S. Lipomas of oral cavity: Case reports with review of literature. J Maxillofac Oral Surg 2009;8:394-7.
- Weiss SW, Goldblum JR. Benign lipomatous tumors. In: Enzinger and Weiss's soft tissue tumors. 4<sup>th</sup> ed. St. Louis: Mosby, Inc; 2001. p. 575.
- Calhoun NR. Lipoma of submandibular space: Report of a case. Oral Surg Oral Med Oral Pathol 1964;17:815-7.
- Rogers J, Patil Y, Strickland-Marmol L, Padhya T. Lipomatous tumors of parapharyngeal space: Case series and review of literature. Arch Otolaryngol Head Neck Surg 2010;136:621-4.

Cite this article as: Navaneetham A, Rao A, Gandhi A, Jeevan CA. Lipoma involving the masticator space. Ann Maxillofac Surg 2011;1:93-4. Source of Support: Nil, Conflict of Interest: None declared.