



**ORIGINAL RESEARCH PAPER**

**Otolaryngology**

**ANTERIOR NECK LIPOMA AT UNUSUAL LOCATION, CLINICALLY SIMULATING A THYROID SWELLING: A CASE REPORT**

**KEY WORDS:**

<b>Dr. KC Prasad</b>	Dr. KC Prasad {MBBS, MS, Fellowship in Otolaryngology} Department of ENT and Head and Neck surgery Sri Devaraj Urs Medical College, Tamaka, Kolar
<b>Dr Anjali PK*</b>	Dr Anjali PK{MBBS, Junior resident } Department of ENT and Head and Neck surgery Sri Devaraj Urs Medical College, Tamaka, Kolar*Corresponding Author
<b>Dr Indu varsha G</b>	{MBBS, Junior resident} Department of ENT and Head and Neck surgery Sri Devaraj Urs Medical College, Tamaka, Kolar
<b>Dr Prathyusha Koneru</b>	{MBBS, Junior resident} Department of ENT and Head and Neck surgery Sri Devaraj Urs Medical College, Tamaka, Kolar

**ABSTRACT**

**INTRODUCTION**

Lipoma are the commonest mesenchymal tumors, 50 % of all soft tumors. Even though they can occur anywhere at fat is present, anterior part of the neck is rare. Lipoma in head and neck region is only 13% and is rare.[1] if occurs most commonly it occurs in posterior neck space. There even studies to show lipoma in the intra parotid gland also adhering to sternocleidomastoid muscle.[2] but anterior neck space is rare location

**CASE REPORT**

A 30 year old healthy man came with a history of mass in the anterior aspect of neck since 1.5 years, painless, gradually progressive without any changes in the overlying skin. This was the first visit to the hospital as he was comfortable with the swelling except for the cosmetic reasons. He did not have any history of dysplasia, hoarseness of voice, breathing difficulty. No history of trauma, radiation to neck or hypo or hyperthyroidism features.

**DISCUSSION**

Lipoma being the most common soft tissue tumor occurs in 40-60 years with equal gender distributions(4). If lipoma is benign can be present at head and neck region but very rarely. Clinical appearance can be variable showing pedunculated, sessile or even with surface bisection. (5) The site of tumor decides the clinical presentation like dyspnea, cough, palpitation(6).

When its present in the anterior aspect of neck chance of misdiagnosis is must to differentiate it from thyroid swellings, with preferable treatment of choice excision. One more treatment option can be liposuction for lipomas, makes it more inevitable to have a perfect diagnosis and not dilemmas.

**INTRODUCTION**

Lipoma are the commonest mesenchymal tumors, 50 % of all soft tumors. Even though they can occur anywhere at fat is present, anterior part of the neck is rare. Lipoma in head and neck region is only 13% and is rare.[1] if occurs most commonly it occurs in posterior neck space. There even studies to show lipoma in the intra parotid gland also adhering to sternocleidomastoid muscle.[2] but anterior neck space is rare location. Most of the times they can only be cosmetically disturbing moreover clinical symptoms depend on the size, location and rate and growth of the lesion. Most commonly they can present as a painless mass with well circumscribed borders and gradually progressive lesion. It can associated with syndromes such as hereditary multiple lipomatosis, adeposis dolorosa, gardener syndrome and madelung disease.[3] hereditary obesity diabetes, radiation endocrine disorders, insulin injection, corticosteroid therapy should be kept in mind.

In case in lipoma present in the anterior aspect of neck it can cause diagnostic dilemma.

**CASE REPORT**

A 30 year old healthy man came with a history of mass in the anterior aspect of neck since 1.5 years, painless, gradually progressive without any changes in the overlying skin. This was the first visit to the hospital as he was comfortable with the swelling except for the cosmetic reasons. He did not have any history of dysplasia, hoarseness of voice, breathing difficulty. No history of trauma, radiation to neck or hypo or hyperthyroidism features. It did not increase in size with mastication.

On clinical examination there was a 4x2 cm oval shaped mass well circumscribed, rubbery non tender, non compressible, symmetrical, extending in between both the medial borders of sternocleidomastoid, superiorly up to the level of the corner of the thyroid cartilage, inferiorly below the cricoid cartilage and the

margin was more towards the left side than midline. In the oral cavity there is no other evidence of lesions.

Patient was planned for an ultrasound scan which showed more isoechoic and less hypoechoic fatty mass. To have an upper hand on diagnosis a CT scan was taken which showed hypodense and homogenous lesion. As a part of diagnostic work up fine needle aspiration was done which gave an inconclusive report as the aspiration did not void anything? He was planned for surgical excision and biopsy.

**SURGICAL TECHNIQUE**

Patient was placed in supine position with head turned to opposite side of the lesion (figure:2), with a slight neck extension using a small sand bag under the shoulders. Under aseptic precautions parts painted and draped, brachial plexus (figure:2) block was given as the case was planned to take up under LA. After 5 cm vertical incision a subplatysmal flap was raised. A huge lipomatous rubbery mass was dissected and removed and was sent for histopathological examination (figure:3). Wound was closed in layers. No drain was placed. Post operatively IV antibiotics were given for 2 days, patient was discharged after 3 days and was called back for suture removal.

**HPR**

Gross: Tan yellow coloured fibrotic tissue measuring 5x2x3 cm weighing 110.2gms. No haemorrhages were seen. (figure:4)

On Microscopy: it was a mass without any capsule with mature adipose tissue. No cytotic atypia, necrosis or any other atypical features.

**DISCUSSION**

Lipoma being the most common soft tissue tumor occurs in 40-60 years with equal gender distributions(4). If lipoma is benign can be present at head and neck region but very rarely. Clinical appearance can be variable showing pedunculated, sessile or even

with surface bisection. (5) The site of tumor decides the clinical presentation like dyspnea, cough, palpitation(6).

Studies on FNAC based investigations have identified types of hemartomatous adiposity, thyrolipoma, fat containing non neoplastic condition, fat containing thyroid neoplasm, lipid rich follicular cell lesions, liposarcoma. Cannot do negligence for anterior neck lipoma as surrounding tissues, head and neck anatomy has compact and complicated anatomy. So clear cut diagnostic investigations and well planning is must.

Preoperative investigations help to evaluate the size, location and even histological characteristics (7).At first an ultrasound scan to be done which may show a round mass parallel to skin surfaces. MRI also can be helpful to evaluate the soft tissue swelling and its tissue extend even though not the choice of investigation. MRI will show a black rim around the mass with clear border (8,9). A well encapsulated mass can be identified in the CT scan with septations in the attenuation.(10) Some studies say FNAC as the initial diagnostic for palpable mass in the neck. A variety of diagnosis can be made for palpable masses in the neck, they can be lymphadenopathy, brachial cleft cysts, tumors of the salivary glands, carotid aneurism, neurogenic tumors, dermoid cyst, ectopic thyroid nodules and vascular leomyomas(11).

When its present in the anterior aspect of neck chance of misdiagnosis is must to differentiate it from thyroid swellings, with preferable treatment of choice excision. One more treatment option can be liposuction for lipomas, makes it more inevitable to have a perfect diagnosis and not dilemmas.



Figure: 1



Figure: 2

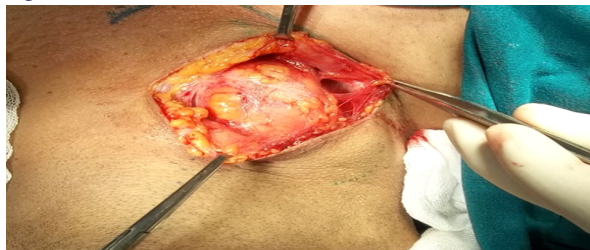


Figure: 3



Figure: 4



Figure: 5

REFERENCES:

1. Sheila L. Butler, and Yolanda C. Oertel, Lipomas of Anterior Neck Simulating Thyroid Nodules: Diagnosis by Fine-Needle Aspiration. *Diagnostic Cytopathology*.1992; 8.N0.5:28-31
2. Kyung Soo Kim, Hoon Shik Yang Unusual locations of lipoma: differential diagnosis of head and neck mass 43, No.12, December 2014;867-70 (<http://www.racgp.org.au/afp/2014/december/>)
3. Medina CR, Schneider S, Mitra A, Spears J, Mitra A. Giant submental lipoma: Case report and review of the literature. *Can J Plast Surg* 2007;15:219-22. Search PubMed (<http://www.ncbi.nlm.nih.gov/pubmed?term=Medina CR, Schneider S, Mitra A, Spears J, Mitra A. Giant submental lipoma: Case report and review of the literature. Can J Plast Surg 2007;15:219-22.>)
4. Furlong MA, Fanburg-Smith JC, Childers EL. Lipoma of the oral and maxillofacial region: Site and subclassification of 125 cases. *Oral Surg Oral Med Oral Pathol Oral Radiol Endod*. 2004;98:441-50. [PubMed]
5. Weiss SW, Goldblum JR. *St Louis: Mosby; 2001. Enzinger and Weiss's Soft Tissue Tumors.*
6. Cawson RA, Binnie WH, Speight PM, Barrett AW. *New York: Churchill Livingstone; 1984. Lucas's pathology of tumors of the oral tissues;* pp. 176-9.
7. Starkman SJ, Olsen SM, Lewis JE, Olsen KD, Sabri A. Lipomatous lesions of the parotid gland: analysis of 70 cases. *Laryngoscope* 2013;123:651-56. Search PubMed (<http://www.ncbi.nlm.nih.gov/pubmed?term=Starkman SJ, Olsen SM, Lewis JE, Olsen KD, Sabri A. Lipomatous lesions of the parotid gland: analysis of 70 cases. Laryngoscope 2013;123:651-56.>)
8. El Monem MH, Gaafar AH, Magdy EA. Lipomas of the head and neck: presentation variability and diagnostic workup. *J Laryngol Otol* 2006;120:47-55. Search PubMed (<http://www.ncbi.nlm.nih.gov/pubmed?term=El Monem MH, Gaafar AH, Magdy EA. Lipomas of the head and neck: presentation variability and diagnostic workup. J Laryngol Otol 2006;120:47-55.>)
9. Dispenza F, De Stefano A, Romano G, Mazzoni A. Post-traumatic lipoma of the parotid gland: case report. *Acta Otorhinolaryngol Ital* 2008;28:87-88. Search PubMed (<http://www.ncbi.nlm.nih.gov/pubmed?term=Dispenza F, De Stefano A, Romano G, Mazzoni A. Posttraumatic lipoma of the parotid gland: case report. Acta Otorhinolaryngol Ital 2008;28:87-88.>)
10. Özcan C, Görür K, Talas D, Aydın ö. Intramuscular benign lipoma of the sternocleidomastoid muscle: a rare cause of neck mass. *Eur Arch Otorhinolaryngol* 2005;262:148-50. Search PubMed (<http://www.ncbi.nlm.nih.gov/pubmed?term=Özcan C, Görür K, Talas D, Aydın ö. Intramuscular benign lipoma of the sternocleidomastoid muscle: a rare cause of neck mass. Eur Arch Otorhinolaryngol 2005;262:148-50.>)
11. Leonidas JR. Lipoma of neck mimicking thyroid nodule. *Lancet*. 1979;1:1195. [PubMed]