

# A Case of Giant Fibrolipoma of Nape of Neck

Dr. Gurudutt Bhaskar Basrur

MS, FRCS. Professor of Surgery, Pacific Medical College and Hospital, Bhilon ka Bedla, Pratappura, Udaipur (Raj.)

## Dr. Navdeep Singh Osahan

PG Resident, Pacific Medical College and Hospital, Bhilon ka Bedla, Pratappura, Udaipur (Raj.)

## Dr. A.K. Vyas

Assistant Professor, Department of Surgery Pacific Medical College and Hospital Bhilon Ka Bedla, Udaipur (Raj.)

## Dr. Dhawal Sharma

Assistant Professor, Department of Surgery Pacific Medical College and Hospital Bhilon Ka Bedla, Udaipur (Raj.)

Address for Correspondence Dr. Gurudutt Bhaskar Basrur gurudutt58@hotmail.com

### ABSTRACT

Lipoma is a benign mesenchymal tumour with a thirteen percent incidence in head and neck region. Posterior triangle is the most common location while anterior neck lipoma is a rare one. Giant lipomas of the neck can present as a cosmetic disfigurement or can produce pressure symptoms. Most lipomas do not pose any difficulty in diagnosis.Surgical excision remains the treatment of choice. We here present a case of giant fibro lipoma of nape of neck.

KEYWORDS: Fibrolipoma, Giant, Neck, FNAC, Excision

### INTRODUCTION

Fibrolipoma is a benign tumour composed of mature lipocytes and has rich fibrous tissue. Often called as "universal tumour" or an "ubiquitous tumour" as they can occur anywhere in the body where there is accumulation of fat cells.<sup>(1,2)</sup> The incidence in head and neck region being thirteen percent.<sup>(3,1)</sup> Lipomas in the neck usually involve the posterior triangle. Anterior neck lipomas are a rare entity while giant anterior neck lipomas (>10 cm) are even rarer, we here present one such case.

#### **CASE REPORT**

58 years old male patient came with chief complaint of swelling on the nape of the neck for 20 years. The swelling was slowly growing, painless and except for unsightly, otherwise asymptomatic. On examination here was a large swelling at the nape of the neck measuring about 15cm × 16.5cm × 16cm, overlying skin was not fixed to the swelling. There were a few visible dilated veins and there waslack of hairs over the swelling. The swelling was not tender and was firm in consistency, Investigations include Hb - 10.7gm/dl, TLC -8700/cu. mm, platelet count - 1.87 lac/cu.mm, serum creatinine - 1.39 mg/dl. A provisional diagnosis of lipoma was made. To confirm the diagnosis, an FNAC (Fig.3)was taken and the sample sent to Laboratory for cytological l examination. Microscopy shows mature adipose tissue admixed with dense bands of fibrosis, confirming the diagnosis of fibrolipoma of nape of neck.MRIscan (Fig.1) showed a well-defined exophytic fat intensity lesion in the nap of neck posteriorly in the subcutaneous plane suggestive of lipomatous lesion.





Fig.1: T2 weighted MRI image showing giant Fibrolipoma at neck without any deeper connections



Fig.2: Angiography of the head showing patent arterial vasculature without any connections with the lipoma

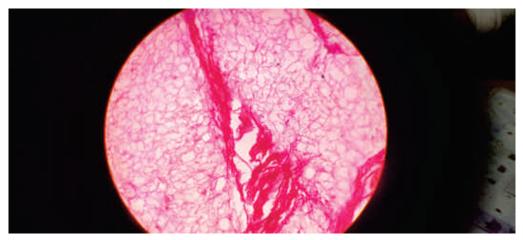


Fig.3: H &E (20×) stained section showing mature adipose tissue and dense fibrous bands



Surgical excision was planned (Fig.4). Procedure includes elliptical incision given around the swelling, incision deepened into fascia, deep upto neck muscles, mass was excised in toto (Fig. 5) and a 14-size drain was placed, subcutaneous tissue closed with absorbable 2-0 material and the skin was closed with staples. The excised specimen weighed 3.5 Kg (Fig.6). Post-operative period was uneventful (Fig.7) and we followed the patient for three months and there was no recurrence.



Fig.4: Pre-operative photograph taken just before the surgery

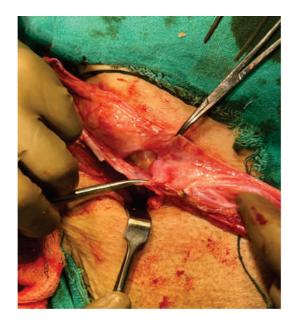


Fig.5: Operative Photograph. Intra-operative finding after excision swelling showing no communication with spinal cord



Fig.6: Excised Giant Fibrolipoma. The excised specimen weighed 3.5 Kgs

### DISCUSSION

It is the most common benign form of soft tissue tumor.<sup>(4)</sup> Lipomas are benign adipose tumours of mesenchymal origin



**Fig.7: Post-operative Picture** 

secondary to hamartomatous proliferation of mature fat cells.<sup>(5,1)</sup> According to WHO classification of soft tumors these can be classified into nine groups, including lipoma, lipomatosis, lipoblastoma, angiolipoma, myolipoma of soft

tissues, chondroid lipoma, spindle cell lipoma, and finally hibernoma and pleomorphic lipoma.<sup>(6)</sup>

Cheek is the most favoured site in head and neck region followed by the tongue, floor of the mouth, buccal sulcus, vestibule, lip, palate and gingiva.<sup>(7)</sup> Lipomas are tumors with unexplained pathogenesis and etiology.<sup>(8)</sup> Hereditary factors have been reported in conditions such as familiar multiple lipomatosis.<sup>(9)</sup> There is an association with genetic mutation in chromosome 12 in cases of solitary lipomas.<sup>(10,1)</sup>

Clinical features vary greatly depending upon the lesion's size, location and rate of growth. Like most benign tumours they present as a painless, mobile, palpable masses which are often overlooked by patients till they become an appreciable mass as was in our case.<sup>(11,1)</sup> Giant lipomas measure at least >10cm in one dimension, or weighing at least 1000gm.<sup>(12,1)</sup> After long time lipoma may undergo myxomatous degeneration, saponification, calcification, infection, ulceration due to repeated trauma and malignant transformation.<sup>(7)</sup> Rarely malignant transformation of lipoma into liposarcoma has been described.<sup>(13,14)</sup> A rapid increase in size should always raise the suspicion of malignancy. Ultrasonography remains as the initial imaging modality in diagnosis of head and neck lipomas while Fine needle aspiration cytology (FNAC) or computed tomography (CT) is indicated for confirmation of diagnosis.<sup>(15,1)</sup> In our case we have done FNAC and MRI.

Consecutive follow up might be a valid option for asymptomatic patients with posterior neck lipomas.<sup>(1)</sup> Surgical intervention for giant lipomas of the posterior neck is challenging, requiring thorough anatomy of the region and meticulous skills and should be reserved for patients with cosmesis and pressure effects.<sup>(1)</sup> Complete excision with capsule should be performed to prevent recurrence.<sup>(1)</sup>

### CONCLUSION

Giant lipomas in the posterior triangle of neck are common than the anterior part of the neck but in our case, patient presented as giant fibro lipoma.<sup>(1)</sup> Giant fibrolipomas should be considered as possible diagnosis in the differential diagnosis of swellings of the posterior triangle of the neck. Adequate preoperative investigations and a good surgical technique including surgical excision provides full recovery and longlasting relief to the patient without any recurrence.<sup>(1)</sup>

ETHICAL APPROVAL: It is not applicable.

**COMPETING INTERESTS:** Authors have declared that no competing interests exist.

**ACKNOWLEDGEMENT:** The authors acknowledge Dr. K.C.Vyas, Chairperson, Emeritus Professor, Department of Surgery, Pacific Medical College and Hospital, for providing expert guidance in preparing this manuscript.

### REFERENCES

- 1. www.heighpubs.org
- Professor Sir Norman Williams, Professor P. Ronan O'Connell, Professor Andrew W, McCaskie. Bailey &love's short practice of surgery27thedition. CRC Press 2018.
- 3. Leon Barnes. Surgical Pathology of the Head and Neck,

Third Edition. Ref.: https://goo.gl/tLXH3P

- Bancroft LW, Kransdorf MJ, Peterson JJ, O'Connor MI. Benign fatty tumors: Classification, clinical course, imaging appearance and treatment. Skeletal Radiol. 2006;35(10):719-733. DOI: 10.1007/s002560060189y PMID 16927086.
- Martin S. Greenberg, Michael Glick, Jonathan A.Ship. Glick M. Burket's Oral Medicine 11th edition. BC Decker Inc 2008.
- 6. Murphey MD, Carroll JF, Flemming DJ, Pope TL, Gannon FH, Kransdorf MJ. From the archives of the AFIP: Benign musculoskeletal lipomatous lesions. Radiographics. 2004;24:1433-1466.
- Kalia V, Kaushal N, Pahwa D. Giant Subcutaneous Solitary Lipoma Arising In the Neck-Case Report and Review of Literature. 2011; 2: 1-10. Ref.: https://goo.gl/xbDdpC
- Dinesh Kumar Barolia, Devendra Atal. Ulcerated Giant Lipoma over Nape of Neck – A Rare Case. 6(2): 1-4, 2016, Article no.JAMPS.23250.
- 9. Leffell DJ, Braveman AM. Familiar multiple lipomatosis. Report of a case and a review of the literature. JAm AcadDermatol. 1986;15:257-259.
- Italiano A, Ebran N, Attias R, Chevallier A, Monticelli I, et al. NFIB rearrangement in superficial, retroperitoneal, and colonic lipomas with aberrations involving chromosome band 9p22. Genes Chromosom Cancer. 2008; 47:971-977. Ref.: https://goo.gl/3KusNU
- 11. Del Agua C, Felipo F. Adenolipoma of the skin. Dermatol Online J. 2004; 10: 9. Ref.
- 12. Sanchez MR, Golomb FM, Moy JA, Potozkin JR. Giant lipoma: case report and review of the literature. J Am Acad. Dermatol. 1993; 28: 266-268.
- 13. Mentzel T. Cutaneous lipomatous neoplasms. Semi Diagn Pathol. 2001;18:250-257.
- 14. Mentzel T. Biological continuum of benign, atypical, and malignant mesenchymal neoplasms does it exist? J Pathol. 2000;190:523-525.
- 15. Sharma BK, Khanna SK, Bharati M, Gupta A. Anterior neck lipoma with anterior mediastinal extension-a rare case report. Kathmandu Univ. Med. J. 2014; 11: 88-90.