## **Case Report**



# Submandibular lipoma in elderly female in mid western Nepal: A Case Report

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## ABSTRACT

**Background and Objectives:** The submandibular lipomas are relatively rare entity. The reported age of the patients were from birth to 84 years old, and average being 55.7 years. These are mainly asymptomatic and mostly cause aesthetic concerns. Deep lipomas, especially in the head and neck , are not commonly reported. To our knowledge there's not even a single publication regarding the lipoma in the submandibular region in our mid western region as well as in our country.

**Presentation of case:** A 72 years old female presented with complaints of painless progressive neck swelling in the right submandibular region for about 2 years. Clinically, it was thought to be submandibular gland neoplasm/ lymphadenopathy. Ultrasonography (USG) and fine-needle aspiration cytology (FNAC) were done. It was negative for malignancy. She underwent excision of the mass under general anesthesia without postoperative complications. The histopathology confirmed it to be lipoma.

**Discussion:** Lipoma is a common benign mesenchymal tumour that is found almost anywhere in the body. However, a large lipoma is relatively rare in the submandibular region. On clinical doubt, one can rely on USG / MRI (magnetic resonance imaging) and FNAC to rule out diagnostic dilemma. The treatment of choice is simply excision.

**Conclusion:** It's a rare entity and may be the first report of a lipoma in the submandibular region in an elderly people. One should rule out its possibility while going through the submandibular region diseases.

Key Words: submandibular, lipoma, aesthetic INRODUCTION

Lipoma, a common, slow growing, benign, encapsulated tumour of fatty tissue composed of adult fat cells that are subdivided into lobule by septae of fibrous connective tissue, is commonly found anywhere on the body [1,2]. In head and neck, their presentation in areas particularly like submandibular space is relatively uncommon [3,4]. The term Sialolipoma was initially used by Nagao et al. [5]. Sialolipoma are classified as angiolipoma, fibrolipoma, pleomorphic lipoma, spindle cell lipoma and oncocvtic lipoma chondrolipoma, osteolipoma, infiltrating lipoma and spindle cell lipoma. The reported age of the patients were from birth to 84 years old, and average being 55.7 years [1, 2]. These are mainly asymptomatic and mostly cause aesthetic concerns. Deep lipomas, especially in the head and neck, are not commonly reported [2]. Surgical excision is the treatment of choice with almost nil recurrence [1, 6]

## **CASE REPORT**

A 72 years old female from western Nepal, came to ENT OPD of Universal College of Medical Sciences, Bhairahawa, Lumbini zone in 03/01/2015 with the complaints of swelling in the right upper side of neck for around 2 years (fig.1, 2). It was insidious in onset and gradually progressive, painless and without aggravating and relieving factors. On examination, there was a 5 X 4 cm, ovoid, nontender, soft swelling, nonpulsatile, mobile in all directions, not fixed to overlying skin and underlying bone, smooth surface and bimanually palpable. The swelling was extending superiorly to 2 cm above the body of right mandible, inferiorly 3 cm above the suprasternal notch , laterally upto anterior border of sternocleidomastoid muscle and medially 1 cm away from the midline of neck. The oral cavity, oropharynx and larynx examination were unremarkable. Clinically, it was thought to be submandibular gland neoplasm/lymphadenopathy.

Ultrasonography of the right submandibular region showed a well-circumscribed elliptical mass, relatively hyperechoic to the adjacent muscle that was adjacent to the base of the mandible. Fine-needle aspiration cytology showed adipose tissue fragment consisting of cells with large vacuoles of fat and small peripherally located nuclei. Fragments also contained capillary vessels. It was negative for malignancy. She underwent excision of the mass under general anesthesia. The mass, adhered to superficial lobe of submandibular gland and base of body of mandible, was removed in toto (fig.3). Postoperatively she was free of complications (fig. 4).



Fig 1, 2 : Preoperative well defined right submandibular mass



Fig 3 : Excised mass in toto

Histopathology showed sheets of mature adipocytes with nucleus pushed to the periphery and vacuolated to clear cytoplasm admixed with fibrous tissue along and few congested blood vessels, focal areas show normal looking salivary gland and no atypical cells seen. Features were suggestive of lipoma.



Fig 4 : 6<sup>th</sup> postop day without complications

## DISCUSSION

Lipoma is a common benign mesenchymal tumour that is found almost anywhere in the body. However, a large lipoma is relatively rare in the submandibular region [2]. As per clinical and microscopic features, it is classified into intramuscular (deep seated lipomas arising within the skeletal muscle intermuscular fibers), lipomas (arising between skeletal muscle fibers) [2]. Also conventionally lipomas are divided into three types. Superficial lipomas (arise within subcutaneous tissue), deep lipoma (arise within deep soft tissue) and perosteal lipoma (arise within surfaces of the bone) [4].

Intramuscular lipomas account for 0 to 5.0% of all benign adipocytic tumours, whereas intermuscular lipomas account for 0.3 to 1.9% [3]. The clinical and histological features of the deep lipoma described here were similar to those reported in the

literature, with greater frequency among males, greater frequency among patients aged 40 to 60 years [3].

The literature on such deep lipomas in elderly female is almost nil. Lipomas are generally diagnosed by clinical examination, however it is not adequate to identify the nature and exact location of the mass, particularly in cases of deep tumour. In such situations, imaging and histopathological tests can be useful as in our case.

Ultrasound and magnetic resonance imaging can differentiate lipomas from other soft tissue tumors. Ultrasound and magnetic resonance imaging can differentiate lipomas from other soft tissue tumours. Magnetic resonance imaging is better than ultrasound for differentiating lipomas from other soft tissue tumours.

## CONCLUSION

In the case reported here, ultrasonography and histopathological examination were useful for the diagnosis [3, 4]. However, distinction should be made from other salivary gland neoplasms such as simple lipoma, pleomorphic adenoma, or oncocytoma. Surgical excision is the treatment of choice [1]. It has a good prognosis with a low risk of recurrence [3, 4].

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## **AUTHOR'S CONTRIBUTION**

**BT-** wrote the the entire article and did much of the literature review; **BNB-** completed most of the edits. All authors read and approved the final manuscript.

## ETHICAL CONSIDERATION

Ethical approval and consent were taken from institution review board. Written informed consent was obtained from the patient for publication of this case report and any accompanying images.

## **SOURCE OF SUPPORT**

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## **CONFLICT OF INTEREST**

There's no conflict of interest regarding the publication of this paper. It hasn't been presented till date in any forms.

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