

Intramuscular Lipoma of Chin - A Rare Case Report

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Abstract: 21 year old female presented to the surgery department with the complains of swelling over the chin for the past 1 year. Initially the swelling was 1*1 cm and it progressed to the present size 3*1 cm. Patient was subjected to fine needle aspiration cytology, since the report was not conclusive excision biopsy was done and sent for histopathological examination which revealed a picture of intramuscular lipoma. The Intramuscular lipoma of the chin is a uncommon presentation. Recurrence is common when adequate clearance is not achieved.

Key Words: Lipoma, Intramuscular lipoma.

I. Introduction

Lipoma is a benign adipocytic tumour which accounts to 0.1-5% of the head and neck neoplasm. Owing to the occurrence of lipoma in all parts of the body, it is also called universal tumour(1).Lipomas are tumours of non neural origin accounting for approximately 16% of the soft tissue mesenchymaltumour(2).

Surgeons variably name the different types of lipomas by the body part affectedA)subcutaneouslipomas or superficial subcutaneous lipomas like - head lipoma, neck lipoma and back lipomaB) Internal lipomas involving the organs like-brain lipoma, intestinal lipoma, and intramuscular lipoma.

II. Case Report

A 21yearoldfemalereported to the Department of General Surgery, at Rajah Muthaiah Medical College, Chidambaram, Tamilnaduwith the complaint of a swelling in front of the chin for 1 year. Initially it was small and it progressed to present size of 3x1 cm at the time of presentation(Fig 1). Patient had no associated symptoms of pain, fever, or paresthesia. There wasno history of any trauma.

Local examination revealed an round shaped mass in front of the chin region measuring about 3 × 1cm. Skin over the swelling was normal with no secondary changes. On palpation, it was soft, skin over theswelling was pinchable and slip sign was positive. When the patient was asked to contract her chin muscles, there was slight restriction of mobility of the swelling. Intraoral examination was normal.

Ultrasonography revealed ill-defined regions of altered echogenicity similar to subcutaneous fat. Features were suggestive oflipoma/fibrolipoma. Fine-needle aspiration cytology correlation was attempted twice but however, it was not conclusive. A provisional diagnosis oflipoma was made and excision of the lesion was planned.The lesion was excised under general anaesthesia. The excised specimen measured roughly 2*1*1 cm(Fig 2). Hemostasis was achieved and the wound closure was done. On follow-up, healing was satisfactory with an acceptable scar.

Histopathological examination: Macroscopic picture showed single grey/brown/grey/black soft tissue mass measuring 2*1*1 cm. Cut section revealed solid grey/brown/grey/white areas. Microscopic picture showed skeletal muscle tissue and benign mature adipocytes seen in collections. Scattered inflammatory cells infiltrates predominantly composed of lymphocytes are present(Fig 3&4). The impression was given as Intramuscular lipoma



Fig 1

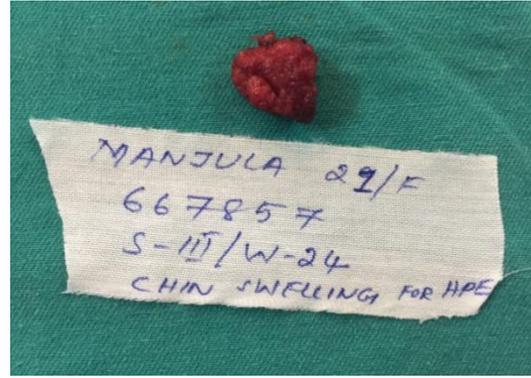


Fig 2

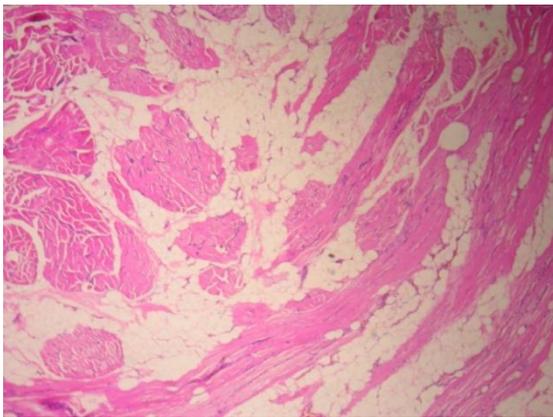


Fig 3

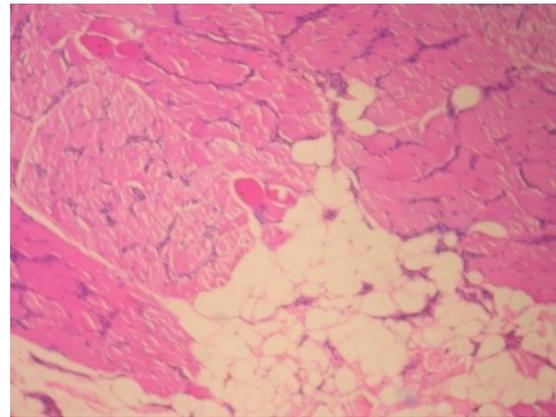


Fig 4

III. Discussion

Lipomas are benign soft tissue tumours composed of mature adipocytes. According to 2002 World Health Organization's committee for the Classification of Soft Tissue Tumors, lipomas are categorized into 9 entities, includes -lipoma, lipomatosis, lipomatosis of nerve, lipoblastoma, angioliipoma, myoliipoma of soft tissue, chondroidlipoma, spindle cell/pleomorphiciipoma and hibernoma(3).

Intramuscular (infiltrating) lipoma is a uncommon variant of lipoma first defined by Regan and his colleagues in 1946(4). Despite their infiltrative nature and their tendency to recur locally, intramuscular lipomas are benign which do not have malignant potential and do not metastasize.

Intramuscular lipoma is usually well demarcated, but has no capsule which infiltrates into the adjacent muscle fibres. 50% of lipomas occur in the thigh, 20% in the shoulder and upper arm, 20% in the chest wall, and 10% in other locations where head and neck is extremely rare(5).

Intramuscular lipomas are of primary importance because of their misdiagnosis with liposarcomas due to its large size, deep location and their ability amidst adjacent muscles. Therefore, detailed histological examination is essential in all intramuscular lipomas.

Intramuscular lipoma tend to recur when adequate margins are not given during surgery. The reported recurrence rate of intramuscular infiltrating lipomas ranges from 3% to 62.5%. Careful preoperative evaluation of the margin and wide excision at the infiltrative area during operation are the most important steps to ensure the clear margin and decrease the local recurrence rate

IV. Conclusion

Intramuscular lipomas are a form of benign soft tissue mesenchymal tumours, and their occurrence in head and neck is a rare entity.

Intramuscular lipoma has infiltrating tendencies and high recurrence rates.

Careful clinical, histological, imaging and cytogenetic examination can reveal the typical characteristics of intramuscular lipomas and be pathognomonic in the majority of cases. This can further allow appropriate treatment and prognosis.

Hence, A thorough preoperative history taking, well images study, and tumor excision with clear margin form the cornerstone of success of surgical treatment of intramuscular lipoma.

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