ABSTRACT

Lipoma is a soft tissue benign neoplasm and mainly composed of fat cells. They are commonly found in subcutaneous tissue but they rarely seen in intramuscular or intermuscular tissue. This case report presented an unusual case of frontalis associated lipoma in a 58-year-old male patient.

KEYWORDS: Frontalis muscle, Forehead swelling, Lipoma.

INTRODUCTION

It is benign neoplasm of soft-tissue’s that originate from mesenchymal tissue. It is composed of adipocytes cells which are surrounded by fibrous capsule.[1] In all soft tissue tumors, lipoma is the most common, Nontender, soft, nodule, mobile and asymptomatic which found 20% in head and neck region and 0.5 to 5% in oral cavity. The term frontalis associated lipoma was given by Salashe in 1989.[2] Fernandi et al reported that lipomas are rare in oral and maxillofacial region and it accounts for 1–4.4% of all soft tissue benign neoplasm.[3] Most subcutaneous lipomas may be diagnosed with a high degree of accuracy on clinical examination. We report, due to its rarity, an unusual case of lipoma associated with frontalis muscle in a 58-year-old male patient.
CASE REPORT
A 58-year old male reported to department of Oral & maxillofacial surgery at Career Post graduate institute of dental sciences & hospital, Lucknow, U.P. India, with chief complaint of asymptomatic swelling on right side of the forehead since last 4-5 years. On clinical examination it showed a 5.5 X 6.5 cm firm, nontender, slightly mobile nodular lesion present on right side of forehead [Figure -1]. Provisional diagnosis of this lesion may be liposarcoma, lipoma, epidermoid cyst and sebaseous cyst. Routin blood investigation which showed all the parameter within normal limit and complete surgical excision under local anesthesia was planned.

Before surgery, first, local anesthesia was administered then after incising the skin and superficial fascia transversely through forehead [Figure 2] and frontalis muscle was dissected to reveal a well-circumscribed yellowish mass which was completelly excised [Figure-3] and excised mass was send for histopathological examination [Figure 4]. Flap was approximated with sub-cuticular suturing [Figure-5].

Histopathological examination showed a circumscribed lesion covered by thin fibrous capsule, composed of mature adipocytes cells infiltrating muscle in a diffuse pattern. [Figure -6]. On the basis of above clinical and histopathological examination, confirmed the diagnosis of Lipoma associated with frontalis muscle. No evidence of malignancy was noted.

There were no post-operative complications created and healing was found satisfactory and uneventfully. The patient was followed-up regularly and there were no signs of recurrence at the end of 2-years.

Figure legends

Figure: 1 Pre-operative-incision line marked
Figure: 2 Exposed lipoma after blunt dissection

Figure: 3 Hold lipoma with tissue holding forcep

Figure: 4; Excised mass
DISCUSSION

Lipomas are commonly seen in the superficial fascia whereas the intramuscular lipomas arise from deep investing fascia. Fletcher et al. demonstrated that only 1.8% of fatty tumours are intramuscular lipomas and occur predominantly in middle to late adult life.\textsuperscript{[4]}

Frontalis-associated lipoma are originate from deeper tissue as compared to traditional lipoma which is originate from subcutaneous tissue.\textsuperscript{[5]} Lipoma of forehead also can occur in temporalis muscle as infiltrating type of lipoma.\textsuperscript{[6]} Lipomas are rarely located within the muscles and between the muscles. Among intramuscular lipomas, frontalis-associated lipoma is rarer. Intramuscular lipomas were first reported by Regan in 1946 and they account for a very small number amongst tumours which is originate from adipose tissue.\textsuperscript{[7]}
To differentiate the frontalis-associated lipoma from other subcutaneous nodular swelling, it is very important to have good skill and the knowledge of different subcutaneous nodules of the forehead such as epidermoid cyst, sebaceous cyst, liposarcoma, tumours such as osteoma, desmoids, and other fibrous tumour along with frontalis-associated lipoma in a subcutaneous forehead swelling which have a similar clinical appearance because of deeper lipoma requires deeper incision onto fascia or muscle for complete excision than subcutaneous lipoma.\cite{8}

Histopathologically, intramuscular lipoma can be classified in two types, first one is well-circumscribed and second one is infiltrative types. Circumscribed type shows presence of fibrous capsule and consist of mature adipocytes like superficial lipoma, whereas infiltrative type of lipoma are associated with the muscle atrophy and degenerative changes.\cite{3}

The prognosis of lipoma associated with frontalis muscle is good and chances of recurrence is less because of forehead lipomas are generally benign with no malignant potential, and complete surgical excision is considered curative.

**CONCLUSION**

Forehead lipomas are rare benign tumours with no sex predilection. In differential diagnosis, other lesions like epidermoid cyst, sebaceous cyst etc., with similar clinical features can be considered, hence there is need to make right diagnosis. Complete surgical excision of forehead lipomas is the best treatment of choice.

**REFERENCES**

