

Thenar Intramuscular Lipoma: An Unusual Case

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Citation

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Abstract

Although the palm contains a considerable amount of fat, palmar lipomas are uncommon. We report a 32-year-old male who presented with a 5x5cm lipoma within the thenar muscles of the right hand. The diagnosis was suggested by an MRI scan and surgical excision was performed. Histopathology confirmed absence of malignancy in the specimen. The patient is symptom-free five months later.

INTRODUCTION

Lipomas are the most common, widely distributed benign tumors which present as subcutaneous, soft, non-tender masses. Occasionally, they occur in the hand where they may be subcutaneous or intramuscular. Presentation could be as a painless mass or with muscle weakness due to nerve compression. Correct diagnosis is difficult if the lesion is deep-seated and an MRI scan is useful in such cases. Careful surgical excision is recommended in all cases. Most tumors are benign but malignancy can occur rarely.

CASE REPORT

A 32-year-old male presented with a slowly growing painless swelling on the right hand of 2 years duration. He had lately noticed some difficulty in gripping objects due to the size of the swelling but denied any weakness or numbness of the fingers. Examination revealed a 5x5cm smooth, non-tender swelling within the muscles of the right thenar eminence. The overlying skin was normal and the lesion was free from the underlying bone. Thumb movements were normal except for slight mechanical restriction of opposition due to the lesion. There was no muscle weakness or numbness over the digits. Vascularity was normal distally. There was no axillary adenopathy. A plain X-ray showed a soft-tissue swelling over the thenar eminence with separation of the fingers. MRI revealed a well-defined lobulated soft-tissue lipoma within the right thenar muscles. The flexor tendons and metacarpals appeared normal (Fig. 1).

Figure 1



Excision of the lesion was performed under anesthesia with proximal tourniquet control. Using a skin crease incision the fascia was opened, the thenar muscles were separated and the lipoma was excised in toto. It measured 5x5cm, was encapsulated and separate from the underlying flexor pollicis longus tendon (Fig. 2).

Figure 2



Hemostasis was secured and the wound closed over a suction drain which was removed after 24 hours. There was no neurologic deficit postoperatively and full unrestricted thumb movement was possible. Histopathology revealed a thinly encapsulated lipoma with no evidence of malignancy. At 5 months follow-up, there was no recurrence and the patient continued to have normal hand function with full range of thumb movements.

DISCUSSION

Subcutaneous lipomas are common but these tumors are rarely seen in the hand where they may be subfascial, intramuscular or subcutaneous. Presentation may be as a painless swelling or with mechanical difficulty in grasping objects. Median nerve compression can occur if the tumor is subfascial⁽¹⁾. Lipomas within the thenar muscles usually do not produce any muscle weakness or sensory loss in the thumb. Most hand lipomas are benign but malignant tumors have been reported. Although the clinical diagnosis of a benign lipoma can be supported by ultrasonography⁽²⁾, an MRI scan is very useful to document the exact location, size

and relation to neurovascular structures and is the radiologic investigation of choice⁽³⁾. Presence of intramuscular muscle fibers and irregular margins on MRI are compatible with benign lesions⁽⁴⁾. Complete excision is necessary to prevent recurrence; a correctly sited incision of adequate length is vital as deep seated tumours may appear deceptively small on clinical examination. Careful dissection to prevent damage to surrounding tendons, vessels and nerves is recommended^(1,5). Histopathologic examination of the lesion is mandatory to rule out malignancy. Recovery is usually uneventful although transient nerve paresis can occur.

This case highlights the importance of an MRI scan to aid diagnosis and plan excision which is best performed with proximal vascular control and a magnifying loupe if required. Careful follow-up is necessary as recurrences have been reported even if the tumor is benign.

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