Intermuscular hand lipoma: a rare clinical case

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INTRODUCTION

Lipoma is the most common benign tumour of soft tissues, however its presentation at the hand is infrequent. As well rare is the inter or intramuscular presentation, accounting for only 1% of lipomas¹, posing a diagnostic challenge with other lesions involving the hand. Indeed, differential diagnosis with synovitis, tenosynovitis, rheumatoid nodules, malignant tumors, or even with a compression neuropathy by mass effect is important.

Most often presenting as a solitary mass, hand lipomas are often asymptomatic and only come to clinical attention when they are of cosmetic concern or become large enough to create mechanical impairment².

CASE REPORT

A 62 years old woman, manual labourer, presented with pain and functional impairment of the right hand with a year of duration. She complained of pain aggra-

vated when trying to hold objects, thumb paraesthesia and progressive inability to perform her regular occupation. No episode of trauma or other medical problems was mentioned. On clinical examination there was a firm swelling in the thenar eminence, hypoesthesia in the radial side of the thumb and decreased grip strength as compared with the contralateral hand. Tenosynovitis of the thumb flexor tendon was the first hypothesis considered and so an ultrasound examination was ordered.

Ultrasonographic imaging demonstrated a nodular, homogeneous and circumscribed intermuscular hyperechoic area in thenar eminence of right hand (Figure 1). Magnetic resonance of the hand was requested with the purpose of establishing a more confident diagnosis. The findings showed an ovoid lesion compatible with intermuscular lipoma, sized 35x25x14mm, located between the short thumb abductor muscle, the opponens muscle and the short flexor of the thumb, with subcutaneous fat signal intensity on all sequences (Figures 2 and 3).

The mass was removed surgically through palmar access and the histopathological examination confirmed the diagnosis of lipoma. No complications appeared post-operatively.

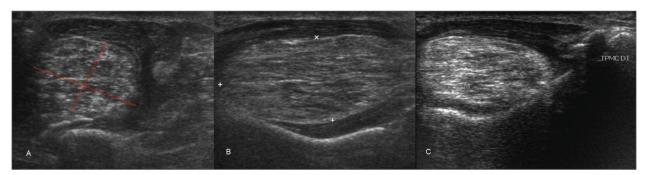


FIGURE 1. Transverse (A) and longitudinal (B) ultrasound view showing a nodular, homogeneous and circumscribed intermuscular hyperechoic area in thenar eminence and the carpometacarpal joint of the right hand (C)

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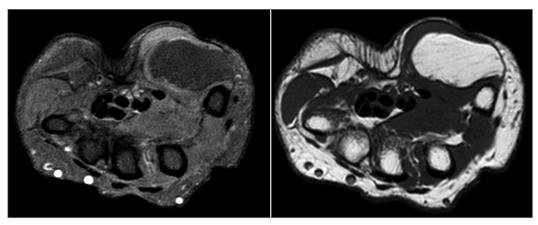


FIGURE 2. Magnetic resonance images showing an ovoid lesion, located between the short thumb abductor muscle, the opponens muscle and the short flexor of the thumb, isointense relative to subcutaneous fat (bright signal on T1 images- axial section)

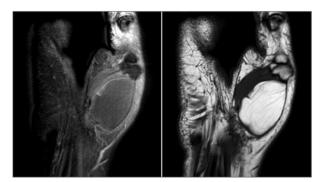


FIGURE 3. Magnetic resonance images (bright signal on T1 images – coronal section)

CONCLUSION

Palm tumors are rare and only a small percentage corresponds to tumours originating from adipocytes, such as lipomas, adipofibrosis, angiolipomas, lipoblastomas and fibro-fatty hamartoma³.

Hand lipomas are often large and usually develop over the palmar aspect of the hand at the thenar eminence. They may extend among muscles and tendons resulting sometimes in badly defined contours.

Ultrasound examination may be used as a reasonable and cost-effective exam, if the suspicion for malignancy is low and the tumour is superficial. They can be described based on their echotexture and

compressibility. However, particularly in deep intra or intermuscular lipomas, magnetic resonance imaging is preferable as it is both highly sensitive and specific for diagnosis, and can provide valuable information regarding size, location, involvement of important surrounding structures enabling to rule out malignancy signs².

Observation remains the clinical standard of care, because malignant degeneration is rare. Surgical resection is indicated when pain, compression neuropathy, mechanical impairment or cosmetic concern affect the patient¹.

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