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RESEARCH ARTICLE

GIANT THENAR LIPOMA ASSOCIATED WITH A CARPAL TUNNEL SYNDROME: A CASE REPORT

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Abstract

The authors report a rare observation of a 60-year-old woman presenting with giant thenar lipoma associated with acroparesthesia due to compression of the median nerve by a lipoma. MRI is the exam of choice to study the local extent of the tumor, the histological examination after complete excision of the tumor remains the only means of diagnostic affirmation.

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Introduction:-

The hand represents 5% of upper limb lipoma locations [1], however Giant palmar lipoma compressing the median nerve is rare, MRI will reveal the lipomatous nature of the lesion and clarify its relationship with the palmar vasculonervous structures, histology allows to rule out differential diagnoses in particular that of liposarcoma, we report an exceptional invasive form of the thenar compartment while discussing the diagnostic and therapeutic approach.

Case Report:-

60-year-old women ; with type 2 diabetes. Who consults for a a swelling and subcutaneous mass in the right palmar compartment that appeared spontaneously 3years ago and evolving by gradually increasing in volume[fig 1] in a context of general state conservation. Associated with acroparesthesia in the first three fingers; physical examination finds a firm, painless mass in the thenar eminence;with positive tinel,s test,



Figure 1:- Clinical aspect of giant lipoma of the hand.

Standard X-ray [fig 2] showed opacity of the soft parts of the thenar compartment without bone lysis; Electromyography revealed a sensory latency in the distribution area of the median nerve. MRI [fig 3] revealed a

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giant lipoma in the thenar eminence measuring 5.4 cm x 2.4 cm x 4.6 cm extending into the carpal tunnel and compressing the flexor tendons and median nerve;



Figure 2:- X-ray of the hand showed opacity of the soft parts of the thenar compartment.

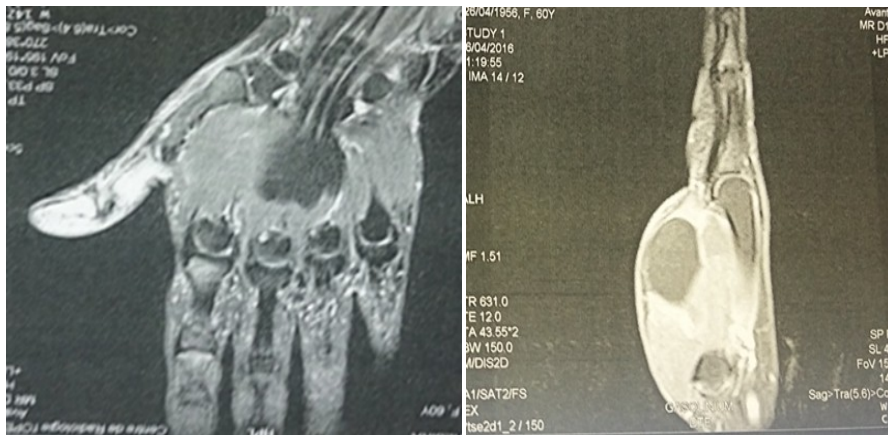


Figure 3:- Giant lipoma of the hand on MRI.

Surgical treatment consisted of resection of the lipomatous mass [fig4] Under axillary block anesthesia; with the application of hemostatic tourniquet and the palmar approach was chosen, histopathological study confirmed the diagnosis of benign lipoma. No complications occurred post-operatively and at 10 months of follow-up we note the regression of sensory disorders with no clinically recurrence detectable



Figure 4:- intraoperative aspect of giant lipoma

Discussion:-

The lipoma is a benign tumor, it is composed of lobules of mature fat cells. At the location of the palm of the hand it can be supra or subaponeurotic exceptionally intramuscular[2], the Giant lipomas are characterized by a size exceeding 5 cm, there are a few reports of giant lipomas in this location[3], the first publication in 1956 reported 17 cases[4], it can cause, depending on its location, compression of the interosseous nerve at the forearm, carpal tunnel syndrome, compression of the ulnar nerve in the Guyon canal or the digital nerves[5], MRI is the examination of choice because of its high sensitivity, it specifies the nature of the lesion its local extension and its relationship with the vasculonervous elements, the characteristic image of the lipoma is a well-limited image in hypersignal on the T1 and T2 sequences with reduction of the signal on the fat suppression sequences[6]

Histologically,[7] Giant lipomas are considered to be the critical size which can be suspected to be malignant hence it is necessary to perform a biopsy which will separate benign lipomas and liposarcomas from other soft tissue neoplasms., the well-differentiated liposarcoma constitutes the differential diagnosis which involves more risk for the patient its peak frequency is between 50 and 70 years it develops from subcutaneous fat or cellular spaces sometimes even from a preexisting or recurrent lipoma

Marginal excision represents the treatment of choice, the dissection and identification of neurovascular elements must be careful to avoid iatrogenic lesions, Recurrences are extremely limited[8] and are usually caused by the defective excision of the tumor,

Conclusion:-

Lipoma of the thenar compartment is relatively rare; especially in its compressive and invasive form; MRI because of its high sensitivity constitutes an important contribution in diagnostic orientation; the prognosis of this benign tumor after successful resection is excellent.

Conflict Of Interest:

The authors have no conflicts of interest to disclose.

Consent:

Patient gives informed consent for publication.

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