

Giant Lipoma of the Hypothenar Eminence A Case Report and Review of Literature

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Abstract

Case Report

Lipomas are very frequent benign soft tissue tumors. They are ubiquitous in the human body but their incidence in the hand is rare. This is a case report of a 20-year-old female who presented with a 10-month history of painful swelling over her palm. Surgical excision of the tumor was done without any consequences on the hand's function and no signs of recurrence at the latest follow-up of 2 years. Although hand lipomas are rare, they should not be neglected. The anatomic particularities of the hand require special care in the diagnostic and therapeutic approach to these tumors.

Keywords: Hand lipoma, Hypothenar eminence, Wide excision.

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INTRODUCTION

Lipomas are very frequent benign tumors. They can have different locations in the human body but their incidence in the hand is rare. They are generally asymptomatic. However, when becoming giant, they can be associated with a variety of symptoms due to compression of adjacent structures [1, 2].

CASE PRESENTATION

This is a case report of a 20-year-old female with no significant past presented with a 10 month history of painful swelling over her palm. The swelling gradually increased in size and caused her occasional pain, paresthesia, and difficulties in her daily activities (Fig 1).

On examination, the patient had a palpable, movable mass at the level of the left hypothenar eminence, of soft consistency. The patient had no motor complaints of the hand, with preservation of strength and digital pincer function. Axillary adenopathy was not palpable. She already had a high-resolution ultrasonography done for her swelling which revealed an encapsulated mass compatible with a lipoma, which measured 5 cm* 4 cm*2 cm.

In a supine position, under regional anesthesia and with an upper limb tourniquet, an incision was given over the hypothenar crease and dissection started (Fig 2). The mass was mainly located in the subcutaneous layer. A yellowish, multi-lobulated mass was seen. Deep dissection showed no profound extensions. The tumor was entirely removed after exploring the palmar digital branches of the ulnar nerve that were intact and running below (Fig 3). The tourniquet was deflated, and the skin was closed and a compressive dressing was placed after the hemostasis was revised.

The procedure lasted for about 50 minutes and there were no complications. The patient was discharged on the same day and was followed up. The anatomopathological result confirmed the diagnosis of lipoma. In the postoperative period, the patient did not complain of any restriction in the finger movements or any sensory loss nor paresthesia, or pain. She was discharged to rehab after the stitches were removed.

Follow-up was done at 2 weeks, 1 month and then monthly for another 3 months. During this time, there was no clinical evidence of tumor recurrence, and wound healing was excellent.



Figure 1: Clinical appearance of swelling of the hypothenar eminence



Figure 2: Hand aspect before skin closure



Figure 3: Macroscopic aspect of the tumor

DISCUSSION

Lipomas are made up of mature fat cells that can develop in the subcutaneous, intermuscular, or intramuscular sites [3]. Their appearance in the hand is uncommon, which makes diagnosis and treatment difficult. Our case involved an unusual location on the hypothenar eminence that was free of neurovascular compression. To our knowledge, only two previous articles have been published regarding hypothenar lipoma [4, 5]. Individuals between the ages of 50 and 60 are more likely to develop hand lipoma. It normally manifests as painless swelling that grows in size by the time the patient seeks medical assistance. Lipomas are diagnosed via ultrasonography, computed tomography, and magnetic resonance imaging (MRI). In most situations, ultrasound is diagnostic, but MRI has a 94% accuracy rate, providing a better characterization of the tumor's size and location, as well as its connection with nearby vascular and nerve structures [6]. The goal of the operation, therefore, was to remove the mass with minimum damage to surrounding tissues. Kim KS and al reported a case of a giant hypothenar lipoma complicated with compression of the palmar digital branch of the ulnar nerve [4]. The branch was temporally transected to get a complete excision of the mass then coopted under microscopy. They had full recovery after 6 months. Therefore, treatment of hand lipomas is monobloc excision after cautious dissection that permits the identification and preservation of all vascular and nerve structures adjacent to the tumor. Hence, complications may be avoided and good results could be achieved.

Disclosure of Interest: The authors declare that they have no competing interest.

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Ethical Approval

This case report got ethical approval from our institution. The patient was given consent form before the surgery.

Consent

Written informed consent was obtained from the patient for publication of this case report and accompanying images.

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