

# Giant Lipoma of The Hand To Extending from Thenar Region To Deep Palmar Space: A Case Report

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## Abstract

Lipomas are the most common tumor in the body. However, hand-localized lipomas are infrequent. The reported incidence of lipomas in the hands and fingers is about 1% of all lipomas. Lipomas usually grow at a very slow rate and larger than 5 cm are called giant lipomas. Giant lipomas should be surgically removed due to the potential increased risk of malignancy. We present a rare case of giant lipoma of the hand to extending from thenar to deep palmar space.

Key words: Giant lipoma; Hand-localized lipoma(s); Deep palmar space

## Özet

Lipomlar, vücutta en sık karşılaşılan tümörlerdir. Ancak, elde lokalize lipomlar oldukça nadirdir. El ve parmaklarda görülen lipomların bildirilmiş insidansı , bütün lipomların yaklaşık %1'i kadardır. Lipomlar, ekseriyetle çok yavaş bir oranda büyür ve 5 cm'den daha büyük olanları dev lipom olarak adlandırılır. Dev lipomlar, potansiyel artmış malignensi riskleri nedeniyle cerrahi olarak çıkarılmalıdır. Olgumuzda, tenar bölgeden derin palmar boşluğa uzanan, nadir görülen bir dev el lipomu olgusunu sunuyoruz.

Anahtar Kelimeler: Dev lipom, elde lokalize lipom (lar), derin palmar boşluk  
Resimlerin Discussion öncesine eklenmesi

## Introduction

Lipomas contain mature fat cells and are the most common benign neoplasms in the body<sup>1</sup>. Giant lipoma is a term used for lipomas larger than 5 cm in hand region. They can grow considerably and their presence in the hand is associated with a variety of symptoms such as tenderness, paresthesias, muscle atrophy<sup>2,3</sup>. In this report, a giant lipoma is presented extending from the tenor region to deep palmar space and extending between the tendon groups.

## Case Presentation

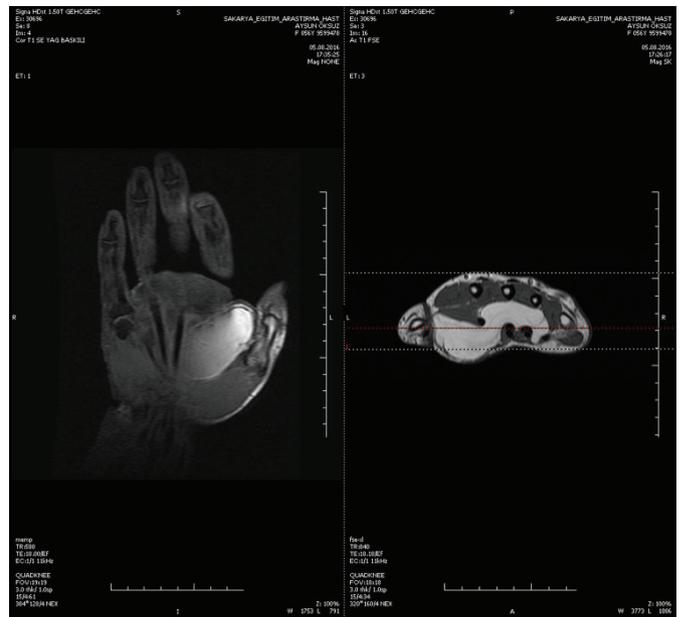
A 56 year old woman presented with a painless swelling on her right arm. She first noticed the swelling two years ago and there was no pain or any symptoms when she noticed the mass. There was no condition, drug and family history. The patient has noticed that the swelling in his hand is getting bigger and the patient's finger movements have decreased for the last 6 months. She had occasional pain and numbness over the palm and all fingers.

Physical examination revealed a soft mobile swelling started from the first web space to hypothenar region. On palpating the mass, it was slightly tender and the overlying skin was intact. The further evaluation with magnetic resonance imaging (MRI) was suggested. MRI examination showed a well orientated tumor which extended from first web space to deep palmar space, between the flexor tendons to hypothenar region. The mass was hyper intense signal in T1 sections and had low signal in fat suppression measuring 25 x 59 x 62 mm (Fig. 1). These findings were suggestive of a giant lipoma of the hand and surgical resection was planned.

Under regional anaesthesia, the arm tourniquet inflated and an oblique- horizontal skin incision was made which extends from first web space to hypothenar border. After the skin incision, it was easily reached to the superficial part in the first interval of the mass. After that the lesion was carefully separated from the overlying palmar fascia, the tendon sheaths and also from the neurovascular structures (Fig. 2). Finally, the whole mass was completely removed in the form of a single mass and it was sent for histopathological analysis.

Histopathological examination of the resected mass revealed a mature adipose tissue consistent with a giant lipoma, and no evidence of any malignancy. After two months the patient reexamined and there was no complication such as neurovascular injury

or wound problem.



**Discussion**

Lipomas most frequently present as a slowly enlarging, soft and mobile mass. History and physical examination must be the first step to diagnosis. When a lipoma in the hand subcutaneously, characteristic “doughy” feel on palpation can be felt. MRI scan is superior to other imaging methods, it clearly shows the extent of the tumor and its relation to important structures. Capelastegui et al found a positive predictive value of up to 94% when comparing MR images with histological reports<sup>4</sup>.

Lipomas larger than 5 cm in hand are called giant lipoma. There is no apparent association that has been proved between tumor volume and patient symptomatology<sup>5,6</sup>.

There is another important factor that giant lipomas have an increased risk of malignancy. Rydholm and Berg reported a retrospective study of 428 cases including lipomas, they found that the incidence of solitary lipoma to sarcoma was 20/1 for lipomas > 5 cm<sup>5</sup>. In the present case, no malignancy finding was found on histopathological examination.

Incidence of lipomas in the hands and fingers is about 1% of all lipomas<sup>1,7</sup>. Most often found in subcutaneous fascia, less common locations are Guyon’s canal, the carpal tunnel or deep palmar space. Hand lipomas are often asymptomatic and the patients apply to hospital due to cosmetic concerns or become large enough to create mechanical impairment. When they are symptomatic, the patients can complain of such symptoms such as restricted range of motion, pain, numbness, loss of sensation, muscle atrophy, decreased grip strength and dysesthesias<sup>8,9</sup>.



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