



A RARE CLINICAL PRESENTATION OF LIPOMA- PALMAR LIPOMATOSIS

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ABSTRACT

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Introduction- Lipoma is the most common and most widely distributed tumor seen in the body. The most common clinical presentation is a gradually increasing, soft and non-tender mass. These tumours are very rare in hands and if they are present then they are of small size and usually one in number. Herewith we are presenting a case of Palmar Lipomatosis which had a large tumour and 4 small size tumour in same palm. Case report- Herewith we are reporting a case of a 40 years old female, presented with the complaints of multiple swellings in the right palm. She first noticed a small swelling on the thenar aspect of palm about 1½ years back; which was slowly, progressively increasing in size since then. Meanwhile patient also noticed some other swellings in the same palm. Incisions were given over thenar, hypothenar and at the bases of finger. All the tumors were removed en-masse. Biopsy report was fibrolipoma. Conclusion- Palmar lipoma is very rare tumour. Palm has very limited space for these tumours to grow but still these tumours can be found in palm. Very limited case reports about the lipoma of hand are present in literature. Here we presented a rare case of palmer lipomatosis which has multiple lipomatous swellings in same plam. They were removed successfully without any residual deformity.

1. PALMAR LIPOMATOSIS - A RAREST CLINICAL PRESENTATION

Introduction: Fat is present and distributed everywhere in the body. Like any other tissue in body fat can also give rise to tumour called as Lipoma. Lipoma is also named as “Universal Tumour” or “Ubiquitous tumour” [1]. Clinically these may present as subcutaneous, subfascial, intermuscular, or in other different locations [2]. Lipomas present as the most common tumor in the body [1]. The occurrence of Lipomas in the hand is usually rare [3]. Some lipomas can grow considerably and their presence in the hand is associated with a variety of symptoms. In this anatomical location they may present with a number of symptoms due to local compression of the surrounding tissues [4]. Usually they are small in size and but Giant Lipomas are more than 5 cm in size. The diagnosis is usually made on clinical grounds, besides plain x-ray, magnetic resonance gives an accurate picture of the masses within the spaces of the hand [5].

Case Report: Herewith we are reporting a case of a 40 years old female, presented with the complaints of multiple swellings in the right palm. She also complained of difficulty in making fist. So there was difficulty in performing daily activities for last 1½ years. She first noticed a small swelling on the thenar aspect of palm about 1½ years back; which was slowly, progressively increasing in size since then. Meanwhile patient also noticed some other swellings in the same palm. There was no pain or numbness associated with the swellings (fig- 1,2 and 3).

On examination a large swelling of about 4x5 cm size was present in thenar region, 2x1 cm in hypothenar and 1x1 cm size in base of fingers. On palpation the margins of the swellings were not well defined. Swelling was non tender, soft in consistency, compressible but not reducible. There was no local rise of temperature or lymphadenopathy, swelling was not fixed to skin and overlying skin was normal in texture. Swelling was not fixed to the underlying structures. There was no evidence of neuropathy. Blood investigations were normal. FNAC of the swelling was done and findings were suggestive of lipoma or fibrolipoma.

Procedure: Patient was laid supine and brachial block was given. Part painted and draped. Incisions were given over thenar, hypothenar and at the bases of finger (Fig- 4, 5, 6 and 7). Careful dissection was carried out starting at the thenar space, moving proximally to distally. All the tumors were removed en-masse (Fig-8). Bleeding controlled and incisions were closed with ethilon 3-0 cutting suture, no drain was put. Cleaning and dressing of the wound was done and hand kept in elevated position.

Specimen sent for histo-pathological examination. Biopsy report was fibrolipoma.

Post-operative period was uneventful and finger movements were started on the 2nd post operative day. Patient was kept on IV antibiotics and oral serropeptidases. Stitches were removed on 8th post operative day (Fig- 9 and 10). There was no residual abnormality.

Discussion: Although there is a good amount of fat in the palm region but lipoma is very rare at this site. Several studies has shown that hand lipomas are not so common and especially the giant lipomas [6, 7]. In a case series reported by Parvanrscu Horia et al, out of 323 tumors in the forearm and hand ,only 4 cases had lipomas in the hand ⁶. Lipomas consist of mature fat cells, which may occur in subcutaneous, inter-muscular or intra-muscular locations. They generally progress slowly. Lipomas in the hand were classified by Mason [8] in 1937 as superficial and deep palmer lipoma and deeper ones are less common than superficial. 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 impairment. In Leffert's series of 141 lipomas of the upper extremity [9] 109 tumors were asymptomatic and excised for aesthetic reasons only. Of the 32 symptomatic lesions, 26 caused pain or tenderness, and 6 produced paresthesias or sensory deficit secondary to nerve compression. Oster, et al. [10] emphasized the peripheral location of the tumours in the palm because of thick palmer fascia in the centre. In our patient also swelling was peripheral (thenar, hypo-thenar, bases of fingers). A few Lipomas that restricted range of motion of the wrist or digits [10] decreased grip strength [10] or caused muscle paralysis [11] polyarthritis [12] trigger finger [13] dysesthesias [13] and muscle atrophy [13] have been reported.

The etiology of a lipoma is unknown. Multiple causative factors have been proposed that include genetic [14] traumatic [15] and metabolic [16] triggers. The genetic theory for lipoma formation proposes that spontaneous karyotypic anomalies lead to chromosomal fusion products which promote proliferation of adipocytes [14]. lipomas are most commonly associated with translocations and rearrangements of the 12q13~q15 chromosomal region ¹⁴. It is important for surgeon to place surgical incision in such a way to get access to the tumour that in post-operative period it avoids the surgical scar contraction and deformity. The release of deeper structures such as palmar fascia or transverse carpal ligament should also be considered according to the extent and the depth of the mass. The important neurovascular structures should be identified carefully and protected. It is advisable to start the dissection and identify all the structures proximally before the swelling and then move distally tracing and preserving all the important structures carefully.

2. CONCLUSION

Lipoma of hand is a very rare tumor occurrence. This is for the 1st time in the literature that multiple lipoma are present in the palm.

Most of the lipoma usually presents painless and progressively increasing in size.

Surgical incisions planned for excision should allow visualization of proximal and distal extension of tumor and tumour should be removed as a whole. Good surgical technique should be used to prevent complications.

Antibiotics and serropeptidases can be given to prevent infection and oedema.

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Fig-1. Lipomatosis Hand swelling



Fig-2. Lipomatosis Hand swelling, Thenar and hypothenar prominent swellings



Fig-3. Lipomatosis Hand swelling at thenar, hypothenar and bases of fingers



Fig-4. Incision at Thenar Swelling

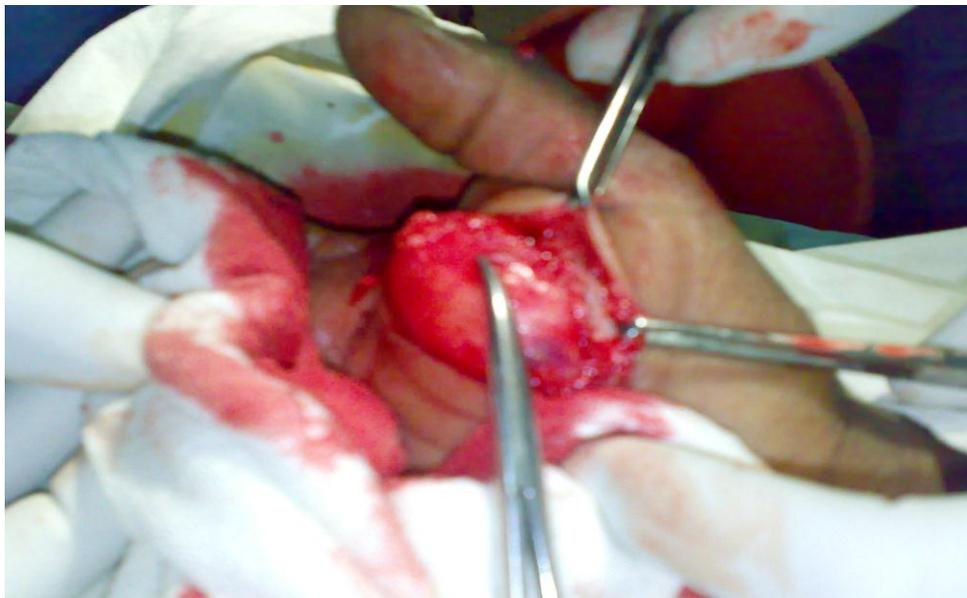


Fig-5. Extraction of Thenar Lipomatous swelling



Fig-6. Extraction of Lipomatous masses from bases of fingers

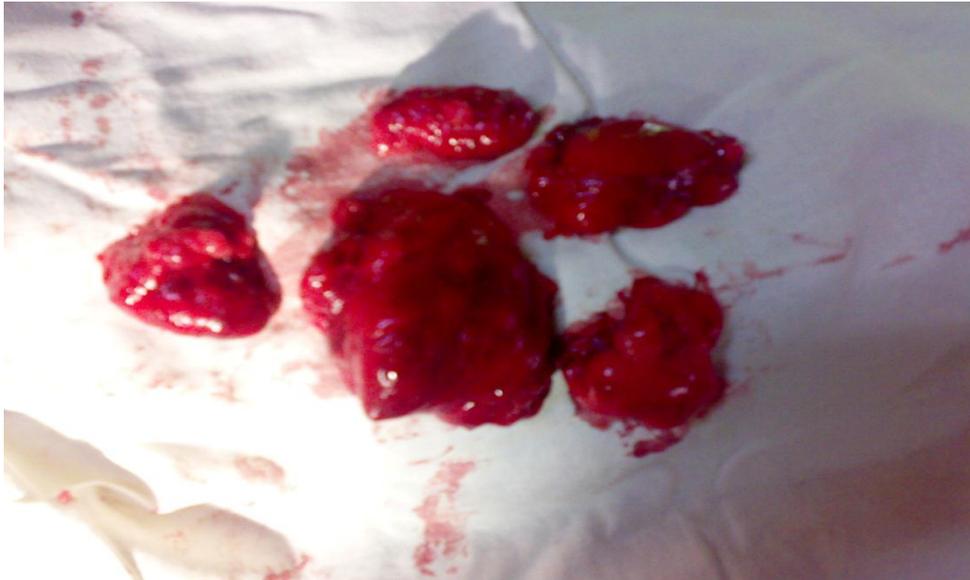


Fig-7. Extracted masses of Lipomatosis



Fig-8. Different incisions used to remove lipomatosis swellings



Fig-9. Post operative healed incisions



Fig-10. Postoperative no residual deformity

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