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Lipoma of Abdominal Wall: An Uncommon and Unusual Location

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Abstract

Lipoma is a benign soft tissue tumor, composed of mature fat cells. It represents by far the most common benign mesenchymal neoplasm which can occur throughout the whole body, but it rarely originates in the abdominal wall. Due to its rare etiologic origin and obscure cause of development, we herby report on a case of a lipoma in a 45-year-old male who presented with chronic left flank pain that was treated by surgery. Histology is fundamental in detecting a malignant transformation.

Keywords: Lipoma; abdominal wall; complete excision.

1. Introduction

Lipomas are the most common of benign soft tissue neoplasms occurring throughout the entire body [1, 2]. Most lipomas rarely cause symptoms due to their superficial location and small size, therefore, surgical resection is required only under conditions of pain, cosmetics, rapid growth rate or and concerns over diagnosis [2, 3].

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However, lipomas of the abdominal wall are rare. Due to this fact, we report herein a case of lipoma located in the abdominal wall causing chronic abdominal pain, which was treated by surgery.

2. Materials and methods

A 45-year-old male presented with intermittent left side abdominal pain for 6 months. The patient had stable vitals. On examination, a soft mass on the left abdominal flank was detected on palpation extending up to left lumbar region with mild tenderness.

Blood investigations were within normal limits. Abdominal ultrasonography and computed tomography showed a well-defined homogenous fatty submuscular mass with a thin capsule above the parietal peritoneum in the left abdominal flank. For definitive diagnosis and relief of symptoms, surgical management was proposed.

3. Result

Laparotomy showed – under general anesthesia- a large soft encapsulated mass of the abdominal wall which was located between the transverse muscle and the parietal peritoneum (fig. 1 and 2). Complete excision was performed successfully. The resected specimen showed a polylobular fatty mass, measuring 17×12.5×4.5 cm in size (fig. 3).

Histopathology was conclusive of spindle cell type of lipoma with no evidence of malignancy. The postoperative course was uneventful, and the patient left the hospital on the 8th postoperative day.

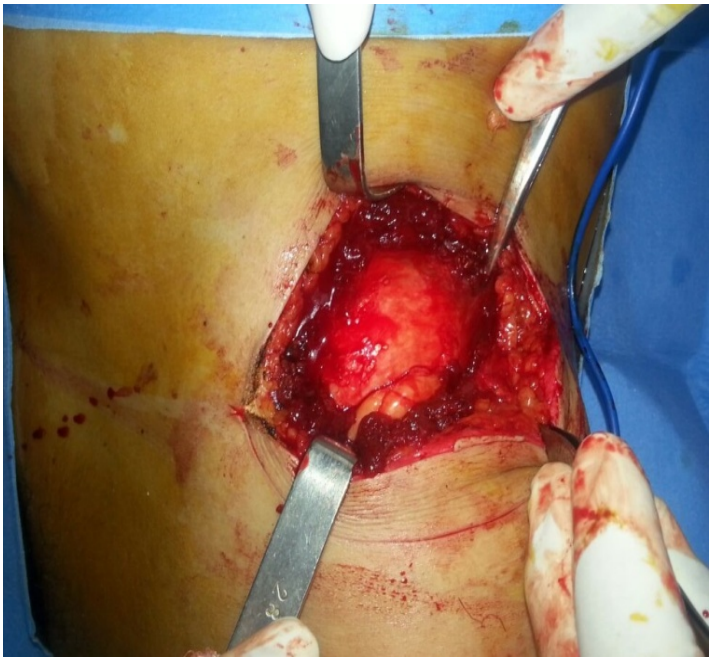

Fig. 1: a fatty submuscular mass with thin capsule above the parietal peritoneum in the left abdominal flank.

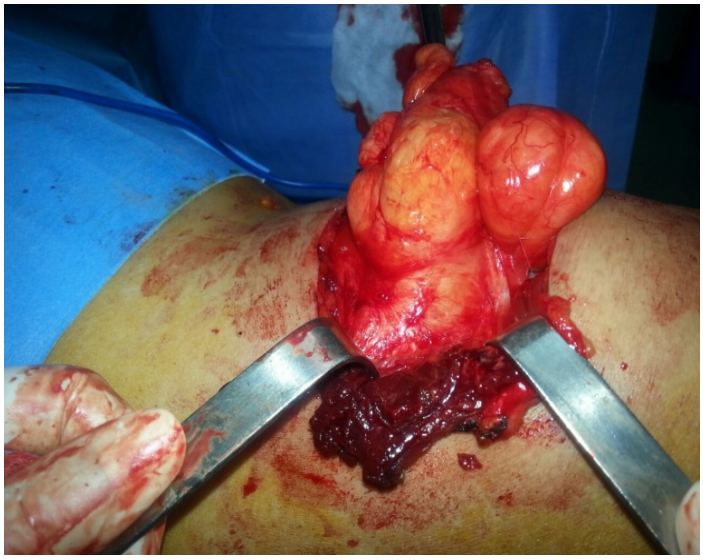

Fig. 2: a complete surgical removal of fatty mass.

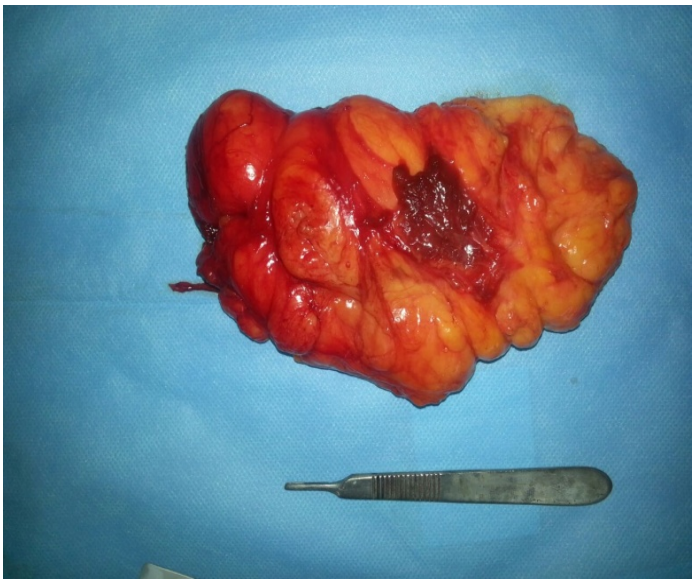

Fig. 3: The resected specimen showed an encapsulated fatty mass, measuring 17×12.5×4.5 cm in size.

4. Discussion

Lipomas are the most common neoplasm of mesenchymal origin and can arise anywhere in the body [4]. The exact prevalence of lipomas is unknown; however, it is likely far higher than reported, because most cases with lipomas may be ignored due to their silent nature. They can arise from either deep or superficial structures and be single or multiple (lipomatosis). Most arise between 40 and 60 years of age and are slow growing, benign tumors [4]; they have a predilection for the trunk and are the most uncommon tumors of the abdominal wall [5]. Very little is known about the pathogenesis of lipomas. An increased incidence is associated with obesity, diabetes mellitus, elevation of serum cholesterol, radiation, familial tendency, chromosomal abnormalities [6]. Lipomas can be detected clinically when superficial or radiologically when deep. Clinically, they appear as

a soft and mobile mass. On ultrasound they appear as iso- to hyperechogenic texture (when compared to the adjacent muscles), surrounded by a thin, echogenic capsule [7]. Deep lipomas can be reliably diagnosed on CT, where they appear as a well-circumscribed submucosal mass with uniform fat attenuation [8]. When treatment of lipoma is warranted, complete surgical excision is advised and it is easily performed because the capsule that surrounds the tumor presents a clear cleavage plane [9] The acceptable recurrence rate is less than 5% [4]. Macroscopically, lipomas are soft, yellow or tan coloured mobile structures which are generally well defined from surrounding tissues. Histologically, they are composed of well-defined adipose tissue with a fibrous capsule [10]. Malignant change of lipoma to liposarcoma is virtually unknown and should be considered [11, 12].

5. Conclusion:

Abdominal wall lipoma is a very rare entity, and many cases might be ignored due to their silent nature. Histological examination after complete tumor removal remains necessary to confirm the diagnosis and rule out malignancy particularly liposarcoma.

Declarations

The authors declare that they have no conflict of interest.

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