

Huge primary scrotal lipoma: Report Of A Case

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Citation

K Ballas, S Rafailidis, N Symeonidis, A Triantaphyllou, K Psarras, T Pavlidis, G Marakis, A Sakadamis. *Huge primary scrotal lipoma: Report Of A Case*. The Internet Journal of Surgery. 2007 Volume 17 Number 2.

Abstract

Most scrotal lipomas originate from and develop in structures in close relation with the scrotal walls and most often in the spermatic cord. Intrascrotal primary lipomas, originating from fat cells of the subcutaneous tissues of the scrotal walls themselves, are very rare and vary in size. We describe a patient with a huge scrotal mass which, to our knowledge, is one of the largest primary scrotal lipomas ever reported in the literature.

INTRODUCTION

Lipomas within the scrotum are extremely rare and are mostly developed from structures in close relation with the scrotal walls rather than from the tissues constituting the walls themselves. Intrascrotal lipomas though may develop from the spermatic cord, herniation of preperitoneal fat or isolated fat cells of the subcutaneous tissues of the scrotal wall (1). More unusually, some can originate from the epididymis, the visceral layer and fat around the tunica vaginalis or the fasciae around the crus of the penis and perineal muscles (2). In most cases, however, the specific site of origin cannot be easily clarified.

We report herein a case of a huge scrotal fibrolipoma which was initially misdiagnosed as a large indirect inguinal hernia.

CASE REPORT

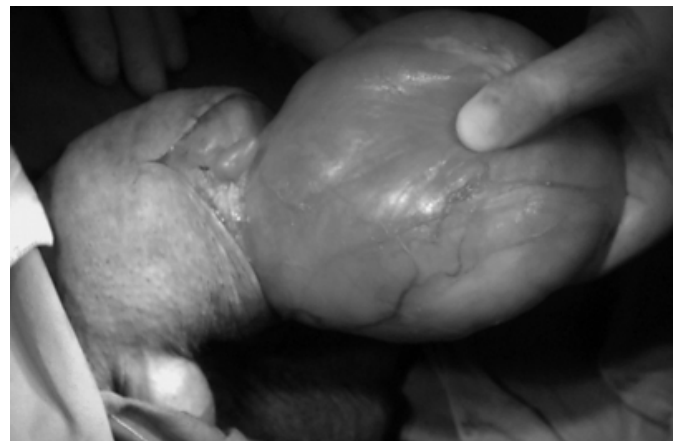
A 65-year-old man was referred to our department with the diagnosis of a large non-reducible inguinal hernia. The patient complained of a non-tender, non-reducible and progressively growing mass located in the left semiscrotum. Physical examination revealed a soft, non-tender mass measuring up to 20cm. The mass was non-reducible and careful examination revealed that it was confined to the scrotum and not extending beyond the external inguinal ring. The mass had no transillumination and diagnosis of hydrocele was excluded. Ultrasound examination revealed a large mass with homogeneous hyperechoic appearance, indicating lipoma. On CT scan, a well circumscribed tumor with low attenuation was revealed, enforcing diagnosis of

lipoma.

An operation using a left scrotal incision was performed. A well encapsulated lipoma (fig. 1) located within the scrotal wall was observed. The tumor was easily removed and the incision was closed with no drainage.

Figure 1

Figure 1: Encapsulated huge scrotal lipoma easily enucleated from left hemiscrotum



On gross pathological examination, an encapsulated mass measuring 21cm in greater dimension with yellow-orange and uniform greasy cut surface with irregular lobular pattern were seen, while in microscopy the presence of mature fat cells in admixture with fibrous connective tissue was revealed.

DISCUSSION

Lipomas, although rare, are the most common benign

neoplasms of intrascrotal tissues and spermatic cord. However, no uniform classification exists. Leyson et al. (1) proposed a classification of these tumors in two broad categories (paratesticular and extratesticular) with many subdivisions, according to their site of origin (Table 1).

Figure 2

Table 1: Classification of intrascrotal lipomas according to their site of origin, as proposed by Leyson et al.

Classification of intrascrotal lipomas according to site of origin	
A. Paratesticular	
1.	spermatic cord
2.	epididymis
3.	tunica vaginalis
4.	testicle
B. Extratesticular	
1.	preperitoneal, preperitoneal or subperitoneal fat herniation
2.	subserous fat around inguinal ring
3.	fasciae and transversalis muscle of perineal area
4.	perineum
5.	isolated fat lobules from subcutaneous tissues of the scrotal wall

This classification, however, lacks simplicity and in most cases there are difficulties in clearly classifying a lipoma in one of these categories. Minami though is reported (3) to have divided intrascrotal lipomas into three types: (a) those originating from the subcutaneous tissue posterior to the spermatic cord, which spread into the scrotum and are called scrotal lipomas, (b) those arising from the fat tissue within or outside the spermatic cord, which develop in the spermatic cord and are called spermatic cord and tunica vaginalis tumors and (c) those originating from fat lobules of the dartos tunica of the scrotum which are rarely seen and called primary scrotal lipomas. This latter classification seems easier to adopt and according to this our lipoma should be classified as a primary scrotal lipoma. Very few primary scrotal lipomas are reported in the literature, although lack of a uniform classification system makes it difficult to estimate the exact number of primary scrotal lipomas originating from fatty tissue of the scrotal wall itself. No more than 30 such lesions have been described, primarily in the Japanese literature. Their size varies greatly and may become quite large. Our case seems to be one of the largest reported, with only some early reports measuring more than 20cm in greater dimension. Although it is commented that primary lipomas of the scrotum tend to occur in boys and young men (3), whereas other types of scrotal lipomas are generally found in men between 40 and 60 years of age (1), our patient

with a primary scrotal lipoma was 65 years old. Ultrasonography, CT and MRI scans play a pivotal role in the evaluation of scrotal masses. Ultrasonography quickly and accurately determines whether a lesion is intratesticular or extratesticular and furthermore delineates its cystic or solid nature. Solid extratesticular masses, like the one reported, are somewhat more problematic to diagnose, with the majority of them though being benign. However, there are occasions when uncertainty exists, especially when a mass cannot be shown to be a lipoma. In such cases the risk of malignancy increases significantly, since when lipomas are excluded, 56% of spermatic cord masses will be malignant (4,5). It is therefore proposed (4) that the management of these tumors should be identical, consisting of a scrotal and inguinal exploration, regardless of whether the condition is believed to be benign or malignant. If the condition is benign, simple enucleation will suffice, while radical inguinal castration should be performed in case of malignancy. Recently, however, MR imaging can be very helpful by depicting with certainty benign lipomas, obviating in this way surgery or changing surgical approach (5). Surgical excision – through scrotal or combined scrotal and inguinal incision – remains the treatment of choice in most cases, and although the majority of extratesticular lesions are benign, sarcomas do occur and should be suspected when masses are large, heterogeneous and envelop or infiltrate other scrotal structures.

CORRESPONDENCE TO

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