

Spermatic Cord Lipoma Resembling an Inguinal Hernia: A Case Report

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Received March 27 2002; accepted August 23 2002

Summary. A 66-year-old man with aneurysm of the abdominal aorta presented with a soft groin mass. The mass, being reducible, had gradually enlarged for the last one-and-a-half years. Diagnosed as having an inguinal hernia, he underwent hernia surgery, together with Y-grafting for aneurysm. Surgical exploration revealed that the mass was lipoma that arose from the spermatic cord. The tumor was covered with a thin fibrous capsule and completely excised. Spermatic cord lipoma should therefore be included in the differential diagnosis of inguinal hernia.

Key words—spermatic cord lipoma, inguinal hernia.

INTRODUCTION

A groin hernia is a common condition that is frequently encountered in surgical clinics. Moreover, hernia repair is one of the most important surgical procedures necessary for surgeons to master in the early periods of their careers because it contains many basic techniques that are essential applications to other major surgeries. The main presentation of the disease is a groin mass. Generally, the diagnosis is not essentially difficult to make after prudently taking the patient's history and performing a careful physical examination. However, there are several disorders that are similar to groin hernia in regard to clinical manifestations, including extraperitoneal endometriosis, embryonic remnants, and varicose veins¹⁻³. It is important for a successful operation to be aware of such disorders that should be differentiated with groin hernia. We present here a

case of spermatic cord lipoma which resembled inguinal hernia. Spermatic cord lipoma is one of the diseases which should be included in a differential diagnosis of groin hernia.

CASE REPORT

A 66-year-old man, scheduled for elective surgery for aneurysm of the abdominal aorta, was admitted to the Department of Surgery, Niigata University Medical Hospital. He complained of inguinal bulging, which had first been noticed one-and-a-half years before and had since gradually enlarged. Physical examination revealed a painless soft mass (4×3 cm) in the external inguinal ring. The mass was reducible and apparent in the standing position. The patient was diagnosed as having an inguinal hernia and underwent hernia surgery, together with Y-grafting for aneurysm.

During surgery, transabdominal observation revealed that there was no opening between the internal and external inguinal rings. However, the inguinal canal was explored through an anterior approach because the preoperative finding of inguinal bulging was definite. A lipoma found in the inguinal canal interwove the funiculus. It was generated from the inside of the internal spermatic fascia and was located in the proximal half of the funiculus. Passing through the internal ring, the tumor extended to the preperitoneal space but did not communicate with the abdominal cavity. The tumor was covered with a thin fibrous capsule (Fig. 1). Although the processus

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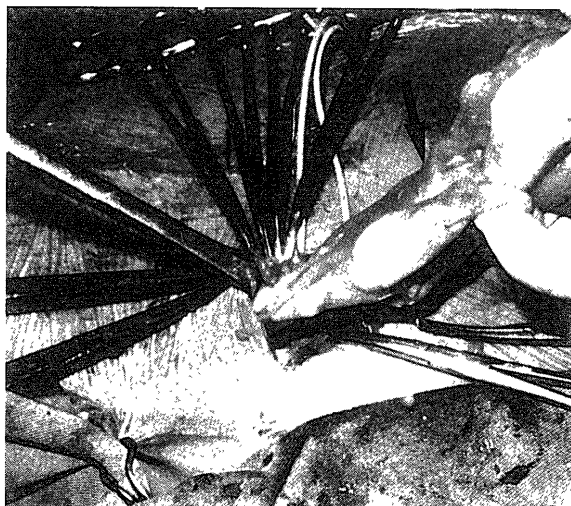


Fig. 1. The tumor (*arrow*) was entirely covered with a thin fibrous capsule. It was generated from the inside of the internal spermatic fascia and located in the proximal half of the funiculus.

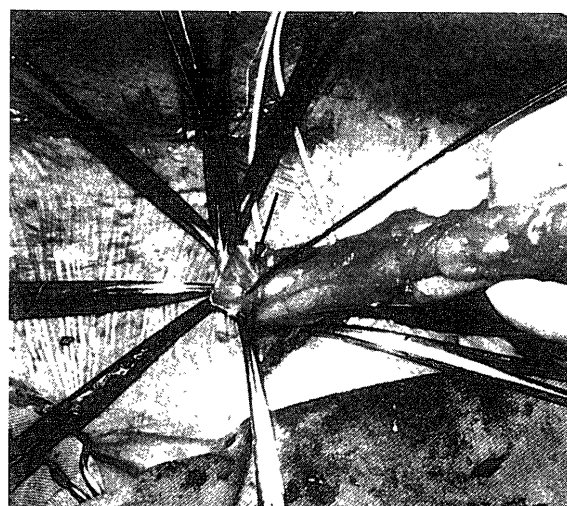


Fig. 2. The processus vaginalis was identified (*arrow*); however, no inguinal hernia was found.

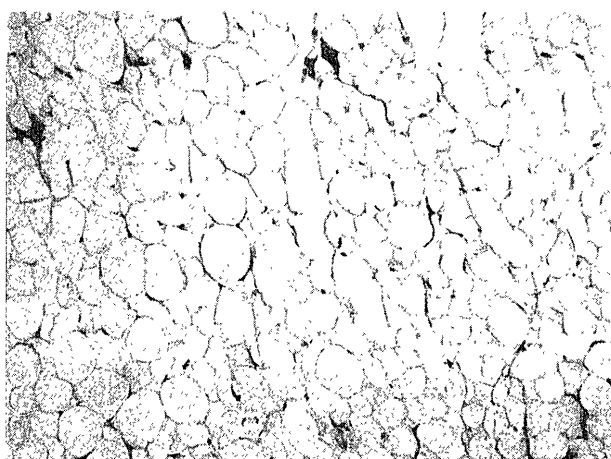


Fig. 3. The tumor was composed of matured adipocytes. There was no atypia of the adipocytes. Hematoxylin-eosin; original magnification, $\times 100$.

vaginalis was identified (Fig. 2), no inguinal hernia was found. The tumor was completely excised and the floor of the inguinal canal was reinforced by an iliopubic tract repair technique. The resected tumor was 13 \times 9 cm in size and 100 g in weight. Histological examination revealed that the tumor was composed of mature adipose tissues (Fig. 3), confirming the diagnosis of lipoma.

The postoperative course was uneventful. No groin mass has been noticed in the first year after the surgery.

DISCUSSION

We present a case of spermatic cord lipoma resembling inguinal hernia. More than 60 cases of paratesticular lipoma have been reported so far in the literature in English and Japanese⁴⁻⁷. Although the disease is not exceptionally rare, spermatic cord lipoma has not yet been widely recognized. The rarity of the disease may be caused partially by the medicolegal ambiguity that lipoma is occasionally confused with the protrusion of adipose tissues physiologically existing in the extraperitoneal space⁸ and partially by the clinical background that both inguinal hernia and lipoma require surgical intervention. However, the authors think that it is clinically important to be aware of the entity of spermatic cord lipoma from two aspects.

First, lipoma is a neoplasm that is prone to local recurrence if it is incompletely removed. Liposarcoma, the malignant counterpart, also occurs in the spermatic cord although the incidence is low. Roslyn et al.⁹ have reported an interesting case of spermatic cord liposarcoma, in which the patients underwent herniorrhaphy and resection of a 2-cm lipomatous mass which was incidentally found in the spermatic cord. Unexpectedly, the pathological examination revealed that the tumor was composed of infiltrating spindle cells and diagnosed as well-differentiated liposarcoma. Schwartz et al.¹⁰ have also reported a similar case of liposarcoma, in which the tumor excised was benign on frozen sections but finally diagnosed as being high-grade sarcoma by

histological examination using permanent sections. Eventually, the patient received a later additional radical surgery. Occasionally, it is difficult to discriminate macroscopically between lipoma and liposarcoma. Moreover, many cases of the spermatic cord lipoma have been diagnosed incidentally during hernia surgery¹¹⁾. This suggests that surgeons should be aware of spermatic cord lipoma and make an effort to accomplish complete resection of the tumor when they encounter the disease.

Second, the spermatic cord lipoma is occasionally diagnosed as inguinal hernia, as was our case⁹⁻¹²⁾. The clinical presentation is a soft groin mass which protrudes with pressure. Additionally, the mass gradually enlarges. These findings are very compatible with inguinal hernia and often lead to a misdiagnosis of inguinal hernia. Several studies have reported the value of ultrasonography, computed tomography scan, and magnetic resonance imaging in qualifying inguinal masses^{6,13-16)}. However, recent medicoeconomical circumstances in Japan have terminated the application of these imaging techniques to the preoperative examination of inguinal hernia. The pivotal step of herniorrhaphy is identification of a hernia sac in the limited time of hernia surgery, in which spinal or local anesthesia is preferably selected. Lipoma is apparently very similar to adipose tissue interwoven with spermatic vessels. Its anatomical complexity combined with the absence of a hernia sac may baffle surgeons. Fortunately, we could easily cope with such unexpected operative findings in our case because transabdominal observation provided information as to the possibility of the absence of a hernia. Complete exploration of the inguinal ring and spermatic cord confirms the diagnosis of spermatic cord lipoma. Fully understanding the anatomy of the inguinal canal is essential for the diagnosis and surgery of inguinal hernia. In addition, spermatic cord lipoma should be kept in mind as one of the differential diagnoses of an inguinal hernia.

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