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Urology

A RARE CASE STUDY OF PRIMARY SCROTAL LIPOMA POSING A DIAGNOSTIC CHALLENGE.

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ABSTRACT In adult males, the presence of scrotal masses is clinically significant because, if they originate from the testicles, they carry a substantial risk of malignancy. Mesenchymal tumors, such as primary scrotal lipoma, are extremely rare occurrences. This condition presents both clinical and diagnostic challenges for surgeons. This case report focuses on a 70-year-old male patient who has a large lipoma in his right scrotum.

KEYWORDS :

INTRODUCTION

In adult males, scrotal masses are of clinical importance because, if they originate from the testicles, they present a significant risk of being cancerous. Scrotal mesenchymal tumors are extremely rare. One type of benign mesenchymal tumor is a scrotal lipoma. These lipomas can mimic inguinal hernias, hydroceles, and other testicular tumors, which can create diagnostic difficulties for surgeons [1]. The primary challenge with these tumors is distinguishing between benign and malignant lesions. This case report discusses a 70-year-old male patient with a large lipoma in the right scrotum.

CASE REPORT

A 70-year-old man came to our hospital with a lump in his right scrotum that had been present for 10 years. The lump was painless and had gradually increased in size over time. Its size remained unchanged during physical activity. Upon examination, the lump was found to be irreducible, non-tender, and soft, with no illumination in the right scrotum. The right testis and spermatic cord were separately palpable and appeared normal. A diagnosis of a right scrotal para-testicular tumor was made, and the patient underwent further investigation, including a scrotal ultrasound, which showed a heterogeneous, well-defined mass measuring 10 × 8 cm, without calcification or necrosis. The testes' size and echotexture were normal. Beta HCG and Alpha Feto protein levels were normal.

FIG 1 & 2: Shows operative pics of scrotal lipoma.

After a comprehensive preoperative evaluation, the patient underwent excision under spinal anesthesia. A transverse scrotal incision was made [Figure 2], and the lump was dissected, separated, and removed from the testis and spermatic cord [Figure 1]. The wound was closed in layers. The postoperative and follow-up periods were uneventful, and histopathology revealed the lump to be a lipoma.

DISCUSSION

Mesenchymal tumors of the scrotum are extremely rare, including lipomas, liposarcomas, fibrosarcomas, fibromas, fibrolipomas, and myxochondrosarcoma [2]. While most testicular lesions are malignant, para-testicular lesions are usually benign, with lipomas being the most common. Scrotal lipomas can be classified based on their origin: (a) posterior to the spermatic cord, (b) from the spermatic cord, (c) from the dartos tunica of the scrotum [3,4]. In contrast, primary scrotal lipomas are rare and more common in young males, whereas the other two types are more frequent in men aged 40 to 60 years [1].

Symptoms and discomfort vary with the lipoma's size, which can range from 225 g to 9 kg [4]. On physical examination, lipomas may resemble an inguinal hernia, potentially leading to unexpected findings during surgery [6]. Diagnostic imaging includes ultrasound (US), computed tomography (CT) scan, and magnetic resonance imaging (MRI). US is the first line of examination, identifying the lump's location and content, whether cystic or solid, to prevent surprises during surgery. MRI is crucial for distinguishing benign from malignant masses. In cases of suspected testicular tumors, tumor markers (alpha-FP, beta-HCG) must be assessed [5]. Even fine-needle aspiration cytology (FNAC) cannot clearly differentiate between benign and malignant lesions due to mass heterogeneity [1].

The preferred treatment is surgical removal with histological diagnosis, essential to rule out malignancy, such as liposarcoma or leiomyosarcoma. These tumors generally have a good prognosis, with no reported cases of malignant degeneration, although recurrences have been noted [7].

CONCLUSION

Scrotal lipomas can mimic conditions such as inguinal hernias, hydroceles, and other testicular tumors, which can create diagnostic difficulties for surgeons. Although ultrasound is the primary imaging technique, it cannot definitively distinguish a lipoma from a liposarcoma, necessitating the use of scrotal MRI, particularly when dealing with a large tumor. Surgical removal is the preferred treatment, and a definitive diagnosis is achieved through histological examination of the excised tissue.

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