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Case Report

Case of large spermatic cord lipoma misdiagnosed as inguinal hernia

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ABSTRACT

Clinically, a pure spermatic cord lipoma has not been recognized as a disease entity but regarded as an incidental finding at the time of hernia repair because it presents as groin symptoms and clinical findings are indistinguishable from those of inguinal hernia. We report the successful treatment of case of huge pure spermatic cord lipoma originally misdiagnosed as inguinal hernia. A 65year male patient presented with progressive swelling, on and off pain in left groin in the last 2 years. On examination it was partially reducible and ultrasonographic scan was showing as inguinal hernia. We proceeded for an open hernia repair, unexpectedly it revealed a large fatty mass attached to spermatic cord and there is no connection to peritoneal cavity near deep ring. Then it is excised and Lichtenstein tension free hernioplasty was done to prevent future development of hernia. Histopathological examination of excised specimen confirmed it is a lipoma of cord.

Keywords: Spermatic Cord lipoma, Inguinal hernia

INTRODUCTION

A spermatic cord lipoma is found in 20-70% of inguinal hernia repairs. The clinical picture of an inguinal hernia with bulging and pain but without an actual indirect hernia sac may become manifest up to 8% of these cases. Lipomas are often found in inguinal canal during surgical repair of inguinal hernias.[1] In the literature, these are known as lipoma of the cord, lipoma of the round ligament, spermatic cord lipoma and inguinal cord lipoma. Spermatic cord lipoma can either accompany a lateral inguinal hernia or occur without synchronous hernia.[1-3] They must be differentiated from the characteristic preperitoneal fatty tissue seen in direct inguinal or femoral hernia.[1]

Spermatic cord lipoma can present with groin symptoms and clinical findings indistinguishable from those of inguinal hernia, which can lead to preoperative misdiagnosis of lipomas. The term 'large lipoma' has yet to be clearly defined. However, lipoma exceeding 10 cm in size has been described to be large in literatures.[4] We are reporting a case of a large spermatic cord lipoma mimicking a inguinal hernia.

CASE REPORT

A 60-year-old male who is hypertensive presented with complaints of progressive swelling and pain in left groin since, 1 year, on examination swelling is 15×12 cms in size present in left inguinoscrotal region which is partially reducible, firm in consistency, testis is palpated separately, cough impulse is positive, get above the swelling is negative and ultrasound scan suggestive of inguinal hernia with omentum as contents. Then we planned for inguinal hernioplasty, surprisingly in intra op we found a large fatty mass which is running along the spermatic cord, arising from pre peritoneal region near deep ring, mass is separated from spermatic cord and sac was not found then we confirmed it is a lipoma of spermatic cord which is excised, as posterior wall is weakened we did lichtenstein tension free hernioplasty,

intra operative and post operative period was uneventful, later histopathological examination revealed it as a lipoma of the cord. Patient is discharged on 4th postoperative day without any complications.

Figure 1: Intraoperative image showing large fatty mass.

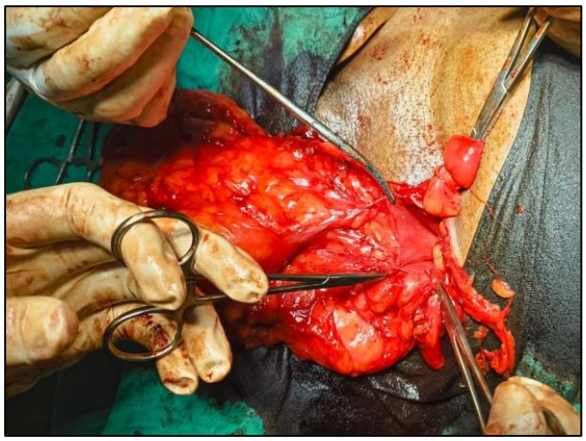

Figure 2: Intraoperative image showing mass is not connected with sac.

DISCUSSION

According to a hypothesis by heller et al, spermatic cord lipomas are masses originating from the pre peritoneal fatty tissue within the internal spermatic fascia of the spermatic cord. Due to its location within the internal spermatic fascia, the spermatic cord lipoma has a close topographical relationship to the deferent duct, pampiniform plexus, testicular artery, cremasteric artery, deferential artery, lymphatics, genital branch of the genitofemoral nerve, and ilioinguinal nerve.[5]

A spermatic cord lipoma can give rise to a clinical picture with bulging and pain mimicking that of inguinal hernia, even in absence of a hernial sac. If an indirect hernia sac is also present, the spermatic cord lipoma will increase the size of bulging clinically diagnosed. In 20-70% of all inguinal hernia repairs, a spermatic cord lipoma is detected either together with an indirect hernia sac or without a hernia sac. The highest prevalences reported were 75% in post mortem dissection study and 71.9% in a clinical study of open inguinal hernia repair.[5,6] The prevalence of spermatic cord lipoma without a visible hernia sac is 1-8%.

Spermatic cord lipomas are the most common benign tumours seen in the inguinal canal.[7-10] Spermatic cord lipoma cannot be reliably diagnosed through clinical examination. Only ultrasound, CT, and MRI are able to assure reliable preoperative diagnosis of spermatic cord lipoma.[11-16] The criteria used to distinguish between a spermatic cord lipoma and a true lipoma are the absence of a connection between the true lipoma and preperitoneal fatty tissue as well as the usual absence of vascularizttion in colour doppler.[14] Liposarcomas are also typically continuous with the pre peritoneal tissue.[11-16] Therefore, if malignant tumors are suspected, incisional biopsy or true cut biopsy should be performed as a first step.

According to the international hernia surgery guidelines, a typical, symptomatic inguinal hernia protrusion seen on clinical examination constitutes an indication for surgery.[17] Further diagnostic workup based on ultrasound, CT, or MRI is generally not needed.[17] However, under consideration of the high prevalence of the spermatic cord lipoma, the indication to perform ultrasound examination in every patient with an obvious or suspected inguinal hernia should be discussed.

Hence, surgery is also indicated for patients without a typical inguinal protrusion but with inguinal pain evidence of a spermatic cord lipoma on ultrasound, CT or MRI.[17,18] In view of close topographical relationship between the spermatic cord lipoma and the arteries, veins, lymphatic, nerves, and deferens duct enclosed by the internal spermatic fascia, dissection in the correct layer is difficult. Blunt dissection is recommended, while sparing the fatty tissue surrounding the spermatic cord structures. Since the fatty tissue of the spermatic cord lipoma has its origin in, and hence obtains its vascular supply from, the pre peritoneal space, it can be either reduced or resected. Resection is only needed if post-reduction mesh placement is impeded. There are no reports in the literature that reduction of spermatic cord lipomas carries any risk of secondary infection by devascularized fatty tissue, thus supporting the hypothesis that spermatic cord lipomas obtain their main vascular supply from the pre peritoneal space.

CONCLUSION

In the treatment and diagnosis of patients with inguinal hernia symptoms, we suggest that pure spermatic cord lipoma should be recognized as a significant clinical entity. Exact preoperative diagnosis should be performed.

Exact preoperative diagnosis is important to avoid unnecessary hernia repair.

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