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Scrotal Lipoma - A Case Study

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ABSTRACT

Lipoma is one of the commonest benign mesenchymal tumor. It occurs with an incidence of 1% of the population. It is composed of fat cells of adult type. It may occur any where in the body, hence called Universal tumor or ubiquitous tumor. But lipomas with in the scrotum are rare and are included under para testicular or extra testicular tumors. To date, definite etiology of lipoma remains uncertain. One theory suggests cytokine release may trigger pre-adipocyte differentiation and maturation. Here we report a case of scrotal lipoma presented as a painless swelling in the scrotum.

Key words: Scrotal swelling, Lipoma, Extra testicular, Ubiquitous tumor.

INTRODUCTION

Lipoma is one of the commonest benign mesenchymal tumor. It occurs with an incidence of 1% of the population. It is composed of fat cells of adult type. It may occur any where in the body, hence called Universal tumor or ubiquitous tumor.[1] But lipomas with in the scrotum are rare and are included under para testicular or extra testicular tumors.[2]

Scrotal lump may be purely scrotal or inguino scrotal. A purely scrotal lump may arise from any of the intra scrotal structures like testis epididymis or components of spermatic cord. Diagnosis of a scrotal lump is often clinical, a clear knowledge of the clinical anatomy and thorough examination plays the pivotal role in the diagnosis of a scrotal swelling. Ultrasonography of the scrotum with doppler study is the commonest, cheap and non invasive imaging technique adopted for evaluation of a scrotal swelling. If Ultra sonographical study fails to explore and confirm the disease, a CT or MRI scan would be the choice of investigation.[3] however final confirmation is with surgical exploration and biopsy.

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CASE REPORT

A 45 years old male patient was referred to Shalyatantra OPD of SDM Ayurveda Hospital, Udupi with the complaint of Lump in the left hemi scrotum since 2 years. He noticed a lump in left hemi scrotum 2 years back. Which is painless and gradually increased in size. No changes on the surface, no fever, no loss of body weight, no functional impairment related to genito-urinary system, no similar lump over the body, having no unprotected sexual history and non DM and HTN .

On physical examination swelling was oval, uniform, regular in outline soft to firm in consistency, non tender and measuring 4.5 x 2.5 cms. Transillumination test was negative.

Ultra sonography revealed a 4.2 x 1.6 cms mass located at the base of the left hemi scrotum with echogenic striations and vascularity on doppler with an impression of an extra testicular tumor suggesting excision biopsy.

An excision biopsy was planned with a left scrotal paramedian incision. An encapsulated fatty lump with

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a vascular pedicle situated within the scrotum was freed and excised.

Figure 1: Clinical examination of the extratesticular lump.

Figure 2: Operative appearance of lipoma.

Operative diagnosis was made as lipoma which measured 4.2 x 1.6cms. Histopathology confirmed the diagnosis of lipoma.

DISCUSSION

The extra testicular scrotal contents consist of the spermatic cord, fascia and epididymis derived from the embryonic descent of the testis through the abdominal wall. As opposed to intra testicular masses, most extra testicular masses are benign.

Lipoma within scrotum are extremely rare and are mostly developed from structures in and close relation with the scrotum walls rather than from the tissue constituting the walls themselves. Intrascrotal lipomas though may develop from the spermatic cord, herniation of properitoneal fat or isolated fat cells of the subcutaneous tissue of the scrotal wall.[16]

More unusually, some can originate from the epididymis, the visceral layer and fat around the tunica vaginalis or the fasciae around the cruss of the penis and perineal muscles.[17]

The most common extra testicular neoplasms are lipoma.[4] It is a benign tumor arising from yellow fat. Where as tumor arising from brown fat is called as hibernoma.

It can be diffuse or localized. The common sites includes subcutaneous tissues of the trunk, the nape of neck, the limbs.

Various types of Lipoma based on Location - Subcutaneous, Subfascial, Intramuscular. Intermuscular in anterior abdominal wall, Parosteal, Subserosal, Submucosal (GI tract), Extradural (not intradural). Intra-articular, Subsynovial, Subperiosteal. Intraglandular - breast, pancreas, kidney.[5]

The extra testicular masses described in the literature are,

1. **An inguinal hernia** is a common paratesticular mass. In some cases, a hernia may manifest as hard, irreducible mass, clinically indistinguishable from a primary scrotal mass .

   Hernia with just omentum can be more difficult to diagnose because their appearance overlaps that of other echogenic masses, perticularly lipomas. Lipoma tends to be more well defined masses, where as herniated omentum appears more elongated and should be traceable back to inguinal area. Scanning along the inguinal canal as well as scrotum is necessary to make the diagnosis.[6],[7],[8],[9]

2. **Scrotal calculi,** also known as scrotoliths or scrotal pearls, are free floating calcification with in tunica vaginalis. They may result from inflammatory deposits on tunica vaginalis that have separated from the lining. These are often associated with hydroceles and repeated micro trauma may be risk factor for their development.[10]

3. **A Fibrous pseudotumors,** is a lesion called by a host of names, including fibroma, fibrous

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proliferation of tunica, chronic periorchitis, non specific paratesticular fibrosis, granulomatous periorchitis, nodular fibropseudo tumor, reactive periorchitis, inflammatory pseudo tumor and scrotal mouse. these are non neoplastic but benign fibro inflammatory reaction resulting one or more nodules and most commonly involving tunica vaginalis. Patients usually presents with painless scrotal masses, but they often have the history of previous infection or trauma.[11]

4. **Polyorchidism** is rare condition results from abnormal embryonically division of the genital ridge. Approximately 75% cases are intra scrotal and patient most often presents as painless scrotal mass. Remaining 20% of the testis are inguinal and 5% retroperitonial. These are more mobile and are risk of torsion and increased prevalence of carcinoma.[11],[12],[13]
5. **Cysts and Granuloma** are the most common epididymal mass is a cyst, among them 20% - 40% are asymptomatic. These masses may be either true epididymal cysts, which are lined by epithelium, contain clear serous fluid and are likely lymphatic origin or spermatocele.[14]
6. **Adenoid tumor** is the most frequent epididymal tumor and accounts of approximately 30% of all para testicular neoplasms, followed by lipoma.[11]
7. These occurs in men with a wide range of age with increased frequency between 20-50 years. Patient usually presents with painless scrotal mass. The tumors are smooth, round and well circumscribed and varying in size between few mm - 5 cm with mesoepithelial origin and universally benign tumor.[12]
8. **Lipoma** are the most common para testicular neoplasm. Most frequently originates from spermatic cord and accounts half of all cord tumors and they can occur other places in the scrotum. Lipoma can range from microscopic to 3.5 kgs with no specific age prediction.[11],[15]

CONCLUSION

Lipoma is the most common benign tumor which may occur in any part of the body and hence termed as Ubiquitous tumor. But its occurrence as an extratesticular lump is uncommon. Scrotal lumps are common in surgical practice of which hernia and hydroceles are the most common followed by cyst of epididymis and spermatocele. These scrotal lumps may often give confusion in making apt clinical diagnosis. Extra testicular tumors although rare should be kept in mind while making clinical diagnosis of a scrotal lump. In case of scrotal mass such as (lipoma), an adequate history and thorough examination plays a pivotal role as scrotum contains multiple anatomical structures. However, investigations like USG, CT and MRI may help further to confirm the diagnosis.

REFERENCES

1. Somen Das. A Concise Textbook of Surgery. 8th edition, Dr Somen Das - Kolkata, 2014;p.114.
2. Leyson JFJ, Doroshow LW, Robbins MA. Extratesticular Lipoma: report of two cases and a new classification, J Urol 1976;116:324-326.
3. Michihiko H, Nobutaka K, Toshiyuk N, Naohiko K, Wataru A, Jun A. Liposarcoma situated in the scrotum to retroperitoneum: A case report. J Jpn Surg Assoc 2002;63:1279-82
4. Maximilian B, Joachim T, Sebastian M, Liposarcoma of spermatic cord: Report of two cases and review of literature.Internet Journal of urology 2005;3:1
5. Somen Das. A Concise Textbook of Surgery. 8th edition, Dr Somen Das - Kolkata, 2014;p.114-115.
6. Black JA, Patel A. Sonography of the abnormal extratesticular space. AJR Am J Roentgenol 1996; 167:507–511.
7. Doherty FJ. Ultrasound of the nonacute scrotum. Semin Ultrasound CT MR 1991; 12:131–156.
8. Subramanyam BR, Balthazar EJ, Raghavendra BN, Horii SC, Hilton S. Sonographic diagnosis of scrotal hernia. AJR Am J Roentgenol 1982; 139: 535–538.
9. Ragheb D, Higgins JL Jr. Ultrasonography of the scrotum: technique, anatomy, and pathologic enti- ties. J Ultrasound Med 2002; 21:171–185.
10. Linkowski GD, Avellone A, Gooding GA. Scrotal calculi: sonographic detection. Radiology 1985; 156:484.

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11. Bostwick DG. Spermatic cord and testicular ad- nexa. In: Bostwick DG, Eble JN, eds. Urologic surgical pathology. St Louis, Mo: Mosby, 1997; 647– 674.
12. Ulbright TM, Amin MB, Young RH. Miscella- neous primary tumors of the testis, adnexa, and spermatic cord. In: Rosai J, Sobin LH, eds. Atlas of tumor pathology, fasc 25, ser 3. Washington, DC: Armed Forces Institute of Pathology, 1999; 235–366.
13. Linkowski GD, Avellone A, Gooding GA. Scrotal calculi: sonographic detection. Radiology 1985; 156:484.
14. Leung ML, Gooding GA, Williams RD. High- resolution sonography of scrotal contents in asymptomatic subjects. AJR Am J Roentgenol 1984; 143:161–164.
15. Beccia DJ, Krane RJ, Olsson CA. Clinical man- agement of non-testicular intrascrotal tumors.J Urol 1976; 116:476 – 479.
16. Florante J, Leyson J, Doroshow LW et al.Extra testicular lipoma :report of two cases and a new classification. J Urol 116:324-6, 1976.
17. Mostofi FK, Price CB. Tumors of male genital system. In Atlas of Tumor pathology. Washington D.C.: Armed force institute of pathology, 1973.

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