



Scrotalis Fibrolipoma: A Case Report

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Abstract: Fibrolipoma is a rare histological subtype of scrotal lipoma and is often a benign mesenchymal neoplasm. Management of this tumor such as surgical excision provides histopathological diagnosis and resolution of symptoms. We reported a case of 44-year-old male who complained of slow growing and painless mass in the right hemiscrotum. The clinical appearance was a mass with firm boundary, smooth surface, dense and tending to be hard with a size of 20 cm x 20 cm x 8 cm. In this case we performed a simple orchiectomy, and histopathological examination of a fibrolipoma had been carried resulting in no malignant cells were found. Although fibrolipomas are histologically benign, regarding their natural history postoperative follow-up is suggested. During postoperative observation, the wound was well maintained and the patient's mobilization was also good. No signs of infection were found, and the pain was still within normal threshold. In conclusion, simple orchiectomy provides histopathological diagnosis and resolution of symptoms.

Keywords: fibrolipoma; scrotum; benign tumor; orchiectomy

INTRODUCTION

Fibrolipoma is a rare benign mesenchymal tumor.^{1,2} Anatomically, fibrolipoma arising from adipose tissue or spermatic cord and extending into the scrotum are named scrotal fibrolipoma.^{1,2} Most fibrolipoma occurring in the scrotum originate and develop in spermatic cord. It is not easy to diagnose scrotal fibrolipoma. The origin regions of these tumors are not always detectable. They can mimic other diseases such as inguinoscrotal hernia, varicocele, hydrocele or testicular tumor. Management such as surgical excision provides histopathological diagnosis and resolution of symptoms.^{1,2}

CASE PRESENTATION

A 44-year-old male, came with a lump at right hemiscrotum. Initially, the lump was the size of corn kernel and enlarged in the last one year. The patient felt painless, there was no fever and weight loss. Mobilization of tumor, family history, and drug injection were denied. The clinical appearance was a mass with firm boundary, smooth surface, dense and tending to be hard with a size of 20 cm x 20 cm x 8 cm (Figure 1).



Figure 1. Pre-procedure inspection

A simple orchietomy and histopathological examination the tumor had been carried out and no malignant cells were found (Figure 2). A small drainage channel was created for a few days.

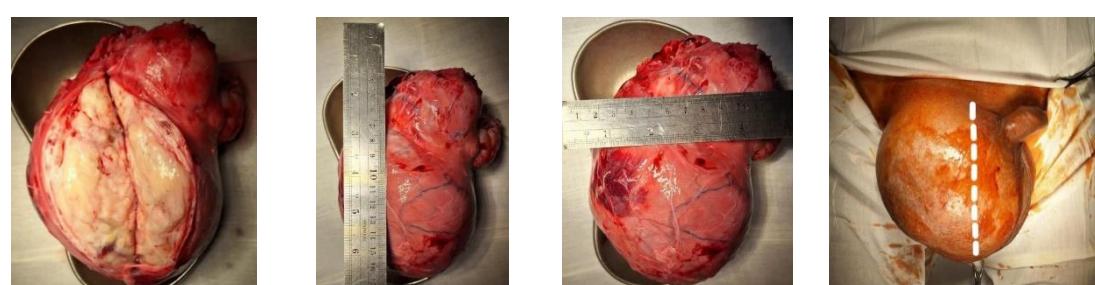


Figure 2. A) incision line for a simple orchietomy procedure; B, C) mass that was removed from the scrotum sac; D) after removal, an incision was made on the mass and fatty tissue was found.

The drain was sewn to the scrotal skin with stitches (Figure 3). There was occasionally some blood staining on the gauze which was normal.



Figure 3. A) Day-1 post-orchietomy; B) Day-2 post-orchietomy. On the first day and the second day, the drain channel was still installed; C) Day-3 post procedure, the drain channel was removed.

Specimens were sent to *Pusat Diagnostik Patologi Anatomi*, Manado. The histopathological result showed that most consisted of fibrous tissue, loose connective tissue, and capillaries with lymphocyte inflammatory cell infiltration, highlighting a benign adipose tissue arranged in lobules, separated by thin fibrous septae; therefore, the diagnosis of lipoma was confirmed (Figure 3).

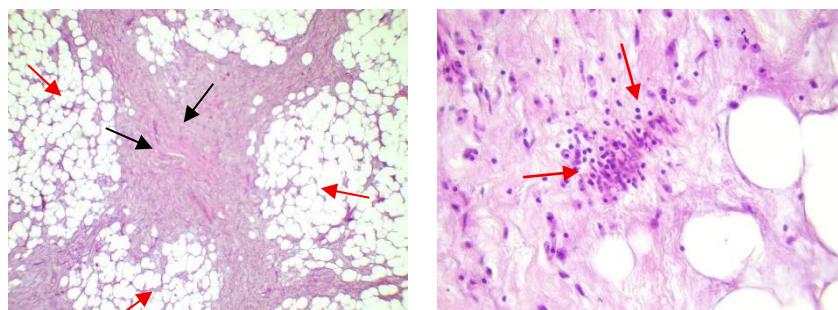


Figure 3. Histopathological results. A) Presence of mature fatty tissue (red arrows) and fibrous connective tissue (black arrows) with spindle-shaped cells (4x10 magnification); B) infiltration of lymphocyte inflammatory cells (40x10 magnification)

During postoperative observation the wound was well maintained and the patient's mobilization was also good. Although some cases showed signs of infection post simple orchectomy procedure, our case did not show any signs of infection and post-procedure pain.

DISCUSSION

Fibrolipomas are benign mesenchymal tumors that are rarely seen in the scrotum. Although there is no concrete classifications available for intrascrotal fibrolipoma yet, recent studies had commonly divided it into three types of origin.^{1,2} Primary scrotal fibrolipoma is usually found in boys and young men, where other types of scrotal fibrolipoma are generally found in men between 40 and 60 years of age.³ Patient with fibrolipoma usually present a sensation of scrotal fullness that progressively increase in size without history of previous trauma or signs of inflammation. The tumor usually manifests as a painless soft tissue mass.⁴ Our patient had a painless lump in the scrotum that grew larger in size within a year.

Scrotal fibrolipoma can mimic other diseases such as inguinoscrotal hernia, varicocele, hydrocele, or testicular tumor. Surgical excision is the treatment of choice for fibrolipoma.^{5,6}

In this case, we performed a simple orchectomy procedure via a vertical incision on the scrotal wall. The testicle and just a short segment of the spermatic cord were removed. All of the cord structures were tied with sutures and then divided the end of the cord. The specimens were sent for further histopathological examination to confirm the diagnosis.

In general, fibrolipomas are depicted on ultrasound as hyperechoic, dense, and usually large extra-testicular masses although the sonographic features can be variable and non-specific.⁷ Magnetic Resonance Imaging (MRI) is certainly more accurate as fat is easily recognizable. However, due to its characteristic signal intensity, MRI is often not helpful in differentiating between fibrolipoma and liposarcoma.⁸

Regarding the clinical features of the tumor, in our case the benign nature of the mass was highly probable as benign scrotal lesion which is usually present as slowly enlarging, asymptomatic or mildly symptomatic, palpable but not fixed masses. On the contrary, malignant tumors of the scrotum are more likely to grow larger in months or even weeks.^{9,10}

Moreover, regarding the natural history of fibrolipomas although it is histologically benign, postoperative follow-up is suggested. During postoperative observation, the wound was well maintained and the patient's mobilization was also good. No signs of infection were found, the pain felt was still within the normal threshold.

Some articles suggest that the simple orchectomy procedure may cause infection in the post-

surgical wound. If severe infection involves part of the scrotal skin, it may be necessary to remove the infected tissue.^{9,10}

CONCLUSION

Fibrolipoma are benign mesenchymal tumors that are rarely seen in scrotum and pose significant diagnostic challenge. Surgery remains the treatment of choice. Surgical excision needs to be done with subsequent histological examination of the scrotal tumor mass. In this case we performed a simple orchectomy procedure. During postoperative observation, the wound was well maintained and the patient's mobilization was also good. no signs of infection were found, the pain felt was still within the normal threshold.

Conflict of Interest

The authors affirm no conflict of interest in this study.

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