# **Case Report**

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# A rare extra scrotal spermatocele: a rare case presentation

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## ABSTRACT

Right Inguinal region pain is a common complaint evaluated in surgical department. The number of differential diagnoses is lowered when the pain in a male patient is associated with a palpable tender mass. These diagnoses include inguinal hernia, inflamed inguinal lymph node, rectus sheath hematoma, cryptorchidism, mass derived from the spermatic cord, and polyorchidism. Right Inguinal region mass and pain caused by a spermatocele are unusual. Here we report a case of extra scrotal spermatocele causing right Inguinal region swelling and pain. To our knowledge this is a second reported case.

Keywords: Spermatocele, Right inguinal region, Spermatic cord, Ultrasonography (USG)

## **INTRODUCTION**

Spermatocele are usually asymptomatic, and they are often found incidentally on physical examination.<sup>1</sup> Most are small with a smooth surface and located at the head of the epididymis. Spermatocele are frequently unilocular but rarely multilocular. The physical examination is usually sufficient to differentiate them from other scrotal lesions. However, scrotal ultrasonography has better results for the differential diagnosis.<sup>2</sup> Intervention for a spermatocele is rarely indicated, and resection of the cystic lesion is entirely based on the patient's symptoms. Surgical intervention should be considered if symptoms include unremitting pain or when the spermatocele has grown to an uncomfortably large size. We report a case of extra scrotal spermatocele presenting as painful mass in the right inguinal region as per our knowledge this is second case reported (Table 1).

#### Table 1: Summary case reported.

Year (reference)	Age (sex)	Complaint	Duration	Therapy
2011 (10)	45 year (male)	Right groin pain.	10 months	surgery
2015 (present)	25 year (male)	Right groin pain.	3 months	conservative

### CASE REPORT

A 25 year old male came in outpatient department with chief complaint of swelling in right inguinal region (Figure 1) with minimal pain since three month. Abdominal examination revealed a  $3 \times 3$  cm well-circumscribed mass in the right lower quadrant that was movable and with pressure could be delivered into the superior aspect of the right hemiscrotum and on scrotal examination there was presence of normal genitalia with 2 normal, nontender descended testicles. The swelling was transilluminant but non reducible, non fluctuant with no cough impulse was present. Ultrasonography was done which showed multiple cystic spaces with peripheral vascularity and internal echoes within is noted in right inguinal region along the course of right spermatic cord suggestive of spermatocele (Figure 2). Fine needle aspiration was done which also revealed swelling to be spermatocele.

### DISCUSSION

A spermatocele is a benign cystic accumulation of sperm often found in the caput of the epididymis. The etiology is unknown. Itoh et al. suggested that senile seminiferous epithelium, which is shed throughout life, deposits and accumulates in the efferent ducts, leading to efferent duct obstruction and subsequent proximal dilation.<sup>4</sup> Most spermatocele are less than 1 cm in diameter and are singly locular.<sup>1</sup> Spermatocele must be differentiated from hydrocele, varicocele, epididymal cysts, tumors, infection, or other scrotal masses.<sup>5</sup> A spermatocele is a transilluminating cystic lesion which lies on the posterolateral border of the testis and does not fluctuate in size upon provocative maneuvers. Cystic fluid analysis may demonstrate sperm content which differentiates it from an epididymal cyst. Urinalysis is indicated to exclude an infectious condition like epididymitis. Scrotal ultrasonography is the most-sensitive and specific imaging study in diagnosing a spermatocele.<sup>6,7</sup> It has nearly a 100% accuracy rate and is more sensitive than a physical examination.7-10 A recent study revealed that palpation detected only 67% of ultrasonographically detected spermatocele<sup>9</sup> so here we describe spermatocele of Inguinal region diagnose ultrasonographically and by fine needle aspiration cytology and treated conservatively.



Figure 1: Swelling in right inguinal region.

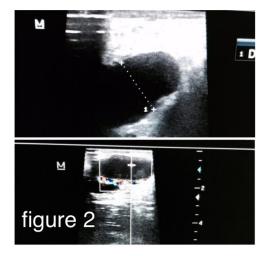


Figure 2: USG finding suggestive of spermatocele.

#### CONCLUSION

So from this case we conclude that spermatocele should be included in the differential diagnosis of inguinal region and depending on whether it is painless or painful medical or surgical intervention respectively should be carried out.

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