

## A rare case report of the left side hydrocele with scrotal calculi

Akhilesh Kumar Patel<sup>1</sup>, Manoj Kela<sup>2</sup>, Aniq Gajdhar<sup>1</sup>, Raunak Gupta<sup>1</sup>, Sanjay Prasad<sup>3</sup>, Meha Ghodawat<sup>4</sup>, Sonam Wadhvani<sup>4</sup>, Rajesh Sharma<sup>2</sup>

From <sup>1</sup>Senior Resident, <sup>2</sup>Professor, <sup>3</sup>Associate Professor, <sup>4</sup>Resident, Department of General Surgery, Sri Aurobindo Institute of Medical Sciences and Postgraduate Institute, Indore, Madhya Pradesh, India

**Correspondence to:** Akhilesh Kumar Patel, HN 24/540, Dwarika Nagar, Rewa, Madhya Pradesh - 486 001, India. E-mail: dr.akhi007@gmail.com

Received - 10 March 2020

Initial Review - 26 March 2020

Accepted - 11 April 2020

### ABSTRACT

Scrotal calculi correspond to the presence of freely floating or located calcifications lying between the layers of the tunica vaginalis of the testes. In the hydrocele fluid, scrotal calculi are found incidentally during ultrasound, operation, or clinical if large in size. A 60-year-old man presented with a left scrotal swelling. He had a history of mild pain while walking. Physical examination of the patient revealed a 12 cm × 8 cm cystic, fluctuant, transilluminate swelling without cough impulse. In ultrasonography, it was suggestive of free fluid with fine internal echo in the left tunica. After incising the tunica vaginalis, evidence of 250 mL of an amber-colored fluid was evacuated and a small round, 0.5 cm sized. The patient recovered well and the post-operative period was uneventful. If the stone is adherent to the tunica albuginea and does not change position on ultrasonography, the possibility of a tumor has to be in mind.

**Key words:** *Calculus, Hydrocele, Scrotal calculus, Scrotal pearl, Stone*

Scrotal calculi (also known as scrotal pearls or fibrinoid loose bodies) are benign entities that are mentioned briefly in the literature. Scrotal calculi correspond to the presence of freely floating or located calcifications lying between the layers of the tunica vaginalis of the testes [1]. It is a rare discovery with a reported incidence ranging between 1.5% and 3% [1,2]. Intrascrotal calculi were first found by Kickham during surgery in 1935 and he described it as a “fibrinoid loose body” or “scrotal pearl” [3].

### CASE REPORT

A 60-year-old man presented with complaints of the left scrotal swelling for 2 years. The swelling was gradual in onset and progressive in nature. He had a history of mild pain while walking for 1 month. The pain was localized to the left scrotal region, mild in nature, non-radiating, and relived on medication. He has a history of hypertension for 5 years and was on regular medication.

On examination, the blood pressure was 140/80 mm/Hg, pulse was 73/min, and the temperature was afebrile. Local examination of the patient revealed a 12 cm × 8 cm cystic, fluctuant, transilluminate swelling without cough impulse and the temperature overlying the swelling was normal. The left testis was not separately palpable.

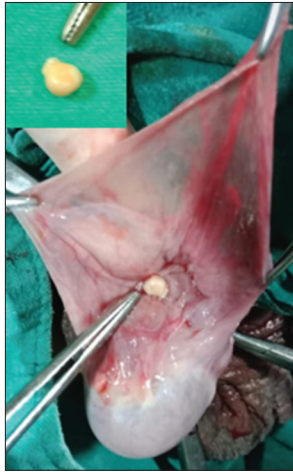
The ultrasonography was suggestive of free fluid with fine internal echo in the left tunica. A calcified focus with posterior acoustic shadow was seen measuring 6 mm in the left scrotal sac. A pre-operative workup was done. The patient was planned

for Jaboulay–Winkelmann procedure. After incising the tunica vaginalis, evidence of 250 mL of an amber-colored fluid was evacuated and a small round, 0.5 cm sized, non-adherent white stone with a smooth surface was found in the hydrocele (Fig. 1). The patient recovered well and the post-operative period was uneventful. After the follow-up of 6 months, there was no complication.

### DISCUSSION

They are an uncommon complication of particularly long-standing hydroceles and can be associated with calcification of the tunica vaginalis [4,5]. Kickham, in 1934, presented the first case of “calcified hydrocele simulating tumor” at the American Urological Association [6]. It is a rare discovery with a reported incidence ranging between 1.5% and 3% [1,2]. Usually, the stones are <1 cm in size; however, they can be of larger sizes. The precise etiopathogenesis of this disease is not known and is linked to inflammation, injury, necrosis, and parasites (filarial). These calculi may develop from remnants of the appendix testis or appendix of epididymis after their torsion and become freely movable in the hydrocele fluid [7].

Frauscher *et al.* have reported that there is a high prevalence of scrotal calculi in extreme mountain bikers most probably due to the chronic microtrauma of scrotal contents, from shock and vibration of the saddle from the rough terrains [8]. Clinically, these calculi are asymptomatic and palpable only if the large or very scant amount of fluid is present in the hydrocele. Most of the



**Figure 1: Scrotal pearl**

calculi are found incidentally during surgery for hydrocele or on sonography. The introduction of ultrasound has led to an increase in the diagnosis of this rare entity with high-frequency transducer ultrasonography. It is the investigation of choice showing the movement of a hyperechoic lesion in the fluid between the tunica, with discrete acoustic shadow [7,8]. However, differentiation from a testicular tumor becomes important if the stone is adherent to the tunica albuginea and does not change its position [4]. The stones are usually composed of carbonate apatite or magnesium ammonium phosphate. In our case, the calculus in the hydrocele was found incidentally during surgery, with thickened and adherent tunica signifying inflammation, which might have been the underlying etiology of the formation of calculus.

## CONCLUSION

Although calculus in hydrocele does not change the management or prognosis, if the stone is adherent to the tunica and does not change position on ultrasonography, there is a possibility of a tumor which should be kept in mind and always rule out.

## REFERENCES

1. Artas H, Orhan I. Scrotal calculi. *J Ultrasound Med* 2007;26:1775-9.
2. Tan S, Özcan MF, Karaođlanođlu M, Ipek A, Özcan AS, Arslan H. Prevalence of scrotal calculi and their relationship with pain. *Diagn Interv Radiol* 2012;18:303-6.
3. Kickham CT. Calcified hydrocele of the tunica vaginalis testis. *N Engl J Med* 1935;212:419.
4. Chatterjee AC. A rare complication of hydrocele. *Br J Surg* 1975;61:891-2.
5. Illingworth C, Dick BM. *A Textbook of Surgical Pathology*. 10<sup>th</sup> ed. London: Churchill Livingstone; 1968. p. 651.
6. Aslan A, Tan S, Yıldırım H, Dönmez U, Çam A, Gezer MC, *et al.* Scrotal calculi in clinical practice and their role in scrotal pain: A prospective study. *J Clin Ultrasound* 2015;43:406-11.
7. Linkowski GD, Avellone A, Gooding GA. Scrotal calculi: Sonographic detection. *Radiology* 1985;156:484.
8. Frauscher F, Klauser A, Stenzl A, Helweg G, Amort B, zur Nedden D. US findings in the scrotum of extreme mountain bikers. *Radiology* 2001;219:427-31.

*Funding: None; Conflict of Interest: None Stated.*

**How to cite this article:** Patel AK, Kela M, Gajdhar A, Gupta R, Prasad S, Ghodawat M, *et al.* A rare case report of the left side hydrocele with scrotal calculi. *Indian J Case Reports*. 2020;6(4):207-208.

Doi: 10.32677/IJCR.2020.v06.i04.019