



A HUGE BIZARRE SCROTAL SWELLING – A CLINICAL ENIGMA

General Surgery

Dr Pawan Kumar Tiwari	Professor and Head, Department of General Surgery, Dr S.S. Tantia Medical College, Hospital And Research Centre. (Tantia University Sri Ganganagar (335002) Rajasthan.) India.
Dr Madhu Tiwari	Professor, Department of Anaesthesiology, Dr S.S. Tantia Medical College, Hospital And Research Centre. (Tantia University Sri Ganganagar (335002) Rajasthan.) India.
Dr Hrishkaran Deep Singh	Department of General Surgery, Faculty of Medicine and Health Sciences, SGT University, Gurugram (122505), Haryana, India.
Dr Milan Patel*	Post-Graduate Resident, Department of General Surgery, Faculty of Medicine and Health Sciences, Gurugram (122505), Haryana, India. *Corresponding Author

KEYWORDS

INTRODUCTION:

Chronic hematocele is a rare condition characterized by the presence of a chronic collection of blood within the tunica vaginalis of the scrotum. It typically occurs as a result of blunt trauma or surgical procedures involving the scrotum. While acute hematocele is more commonly encountered in clinical practice, chronic hematocele presents a diagnostic challenge due to its insidious onset and often nonspecific symptoms. Here, we report a case of chronic hematocele in a 30year old male presenting with persistent scrotal swelling and discomfort without history of trauma.

Case Report:

30y/ male patient who was originally from Bihar and migrated to Gurugram, presented with swelling in right scrotum for 2.5 years. Swelling was insidious in onset and gradually increased to the current size of approximately 20 x15 cm in two and a half years. Occasional complain of dragging pain over the swelling, which got relieved with analgesic medications. No change in the size of swelling on lying down position, walking or with strenuous exercises. Swelling did not increase in size on cough impulse. No burning micturition and no history of trauma to the scrotal region. Patient had no history of weight loss, cough and fever. Patient was not a known case of diabetes and hypertension, had no history of previous hospital admissions.

During examination: Solitary right scrotal swelling of 20x15 cm, with normal overlying skin but with loss of rugosity of scrotal skin(Fig.1). No redness of scrotal skin, no local rise of temperature and no tenderness was present over the scrotum. No increase in size on coughing and B/L hernial sites were normal. Fluctuation and transillumination tests were negative. and Spermatic cord was separately palpable but testis was not separately palpable. Penis was buried in the scrotum. Left testis and spermatic cord was normal. No inguinal lymph nodes were palpable.

Ultrasound report (Fig.1) suggestive of: large, well defined rounded collection with low lying internal echoes was seen in right scrotum, measuring approximately 900cc with no obvious internal vascularity. Right testis not visualised separately. Inguinal lymph nodes of 12mm with maintained fatty hilum. All over **impression suggestive of right testicular abscess.** AFP, beta HCG and LDH were within normal limits.

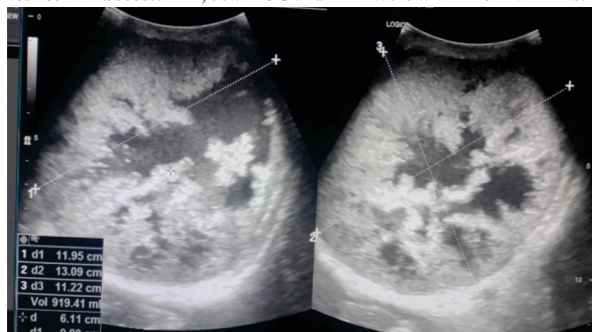


Figure 1 USG S/O right testicular abscess

METHOD:

Approach was made by transverse incision of 10cm over the right scrotal region, about 2cm lateral to median raphe and right scrotal sac was opened in layers. The right spermatic cord was dissected, ligated and cut. The right scrotal mass of 20x15cm was excised in toto(Fig.3). Mass was cut opened and approximately 200ml of haemorrhagic fluid was aspirated. Testicular tissue; which was necrosed, was found on crater of the mass.

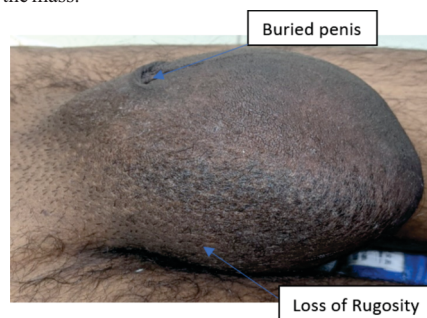


Figure 2. Clinical photograph of scrotal swelling. Patient was taken up for exploratory surgery under SA.



Fig 3. Excised Scrotal Mass



Fig 4. Haematocele cut open

The haemorrhagic fluid was sent for cytopathology and showed intact and disintegrating RBC with leucocytes in proteinaceous background, with no evidence of malignant cells.

Histopathology report (Fig.5&6) was suggestive of organizing haematoma of para-testicular tissue on one side and entrapping testis and epididymis on other side, with no evidence of malignancy.

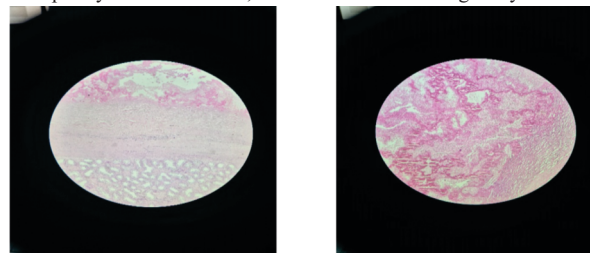


Figure 5 H&E stained section showing seminiferous tubules on the inferior pole and organized hematoma on the superior pole (40X)

Figure 6 H&E stained section showing organized hematoma (400X)
 Testis and epididymis show increased interstitial connective tissue and seminiferous tubules show thickening of basement membrane.

DISCUSSION:

Bibi M et al, in 2018 concluded that Haematocoele is accumulation of blood in between layers of tunica vaginalis and can reach large volumes. They usually present as slow progressing, non-tender swellings which are not trans-illuminating. They may progress to very large sizes in few months to several decades¹. Aetiologically, haematocoeles are either: Idiopathic or Secondary. Idiopathic/spontaneous haematocoeles have no history of trauma, nor pain to organ and are more common in elderly, while secondary haematocoeles are associated with trauma, surgery or neoplasm, but sometimes can be caused by haematological alterations or vasculitis. T Klimis et al, in 2013 concluded that It is more common in ages of 38 to 77 years with mean age being 65 years². In a large haematocoele with unknown cause of bleeding, it is logical to think that bleeding can be due to rupture of vessel in tunica albuginea. Regueiro PD et al, in 2003 concluded that the effect of haematocoele on the testis is deleterious: leading to atrophy and even complete disappearance, this is usually the result of longstanding compression effect of the hematoma which causes displacement, flattening and atrophy of testis, sometimes superimposed infection of the haematocoele complicates the situation more³. Babakri et al, in 2017 concluded that in all 47 cases of haematocoele studied, the ultrasonography findings were equivocal, and definitive diagnosis could only be achieved after surgery and histopathology⁴. Bibi M et al, in 2018 concluded that the biopsy showed fibro-sanguinous material in para-testicular tissue suggestive of chronic haematocoele.

CONCLUSION:

Early recognition and complete evacuation of the hematocoele are the correct management of haematocoele. Idiopathic haematocoele is a rare entity and should be considered in the differential diagnosis of scrotal masses¹. This management avoids testicular compression and prevents epididymo-orchitis, abscess formation and necrosis, which prevents inevitable loss of testis⁴.

REFERENCES:

1. Bibi M, Sellami A, Taktak T, Kassas AZ, Chehida MAB, Chaker K, et al. Idiopathic chronic hematocoele mimicking a mesothelioma of the tunica vaginalis testis. Urol Case Rep. 2018 Aug 1;20:104-105.
2. T Klimis, I Alexandris, A Kyriakidis, K Athanassiou, M Pyrgioti, G Kyriazis, et al. A Case of Chronic Huge Scrotal Haematocoele. Internet J Surg. 2013;30(4):1-4.
3. Regueiro PD, Martinez Garcia de Jalon A, Boned TMA, Sancho Serrano C, GraciaMontolini S, Rioja Sanz LA et al: Idiopathic giant superinfected hematocoele. Actas Urol. Esp; 2003; 27: 645-48
4. Babakri, M.M. 'Chronic scrotal hematocoele: A rare entity and diagnostic dilemma', Urology & Nephrology Open Access Journal, 4(5) (2017).
5. Okubo N, Kobayashi M, Kusakabe T, Kamai T. A case of a hematocoele of the spermatic cord mimicking epididymal tumor. Urol Case Rep. 2020 Jun 23;33:101318.
6. Bickle I, Elfeky M, Weerakkody Y. Scrotal hematocoele. Reference article, Radiopaedia.org (Jun 2024).
7. Leibovitch I, Ramon J, Chaim JB, Nass D, Goldwasser B. Chronic Hematocoele Complicating Renal Failure and Hemodialysis. Journal of Urology [Internet]. 1991 Jul 1 [cited 2024 Jun 28];146(1):162-4.
8. Aoki M, Ishikawa Am Ushiyama T. A case of chronic scrotal hematocoele. Hinyokika Kyo 1995;41:817-9.
9. Hodgkinson DJ, McIlrath DC. Scrotal reconstruction for giant inguinal hernias. Surg Clin North Am. 1984;64:307-13.