

Dystrophic Calcified Nodule Testis - A Rare Case Report

Dr. A.S. Grover¹, Dr. Mukesh Goel², Dr. Abhitesh Singh³, Dr. Guramritpal Singh³, Dr Anil Kumar Suri⁴,
Dr. Sumeet Mahajan⁵

¹Head of Department, Department of Surgery, Gian Sagar Medical College and Hospital, Patiala, Punjab, India

²Associate Professor, Department of Surgery, Gian Sagar Medical College and Hospital, Patiala, Punjab, India

³PG Resident, Department of Surgery, Gian Sagar Medical College and Hospital, Patiala, Punjab, India

⁴Professor and Head of Department Department of Pathology Gian Sagar Medical College and Hospital, Patiala, Punjab, India

⁵PG Resident Department of Surgery, Gian Sagar Medical College and Hospital, Patiala, Punjab, India

*Corresponding author

Dr. Abhitesh Singh

Email: abhitesh230@gmail.com

Abstract: Intratesticular calcification has been a concern for practicing surgeons because of its possible association with testicular cancers. A case of testicular calcified nodule of 23mm size in a 70 year old male is reported who presented to us with complaint of swelling & heaviness in right testis. Pt was evaluated to rule out any testicular tumor. Ultrasonography showed a calcified lesion in right testis. High orchidectomy was done after frozen section report. Post operatively, patient recovered well and was discharged. Our case is a unique one, as till date no case of Testicular calcified nodule of such a large size has been reported.

Keywords: Dystrophic calcified nodule testis, Testicular Macrolithiasis, Testicular Microlithiasis, USG Scrotum.

INTRODUCTION

A 70 years old male presented with complaints of Swelling & heaviness in scrotum since 6-7months. Patient had no past H/o trauma, urinary infection, hypertension, diabetes. Patient had past h/o surgery for renal calculi 3 years back.

On inspection

Right hemi-scrotum was mildly enlarged. Penis was central in position. Overlying skin of scrotum was normal.

On palpation

Right testis was enlarged (about 5cm x 4cm), heavy as compared to the left testis and was stony hard.

Fluctuation & translucency tests were negative. The right testis was non tender, smooth, hard in consistency with loss of testicular sensation, spermatic cord was normally palpable. No swelling palpable separate from the testis.

Ultrasonography of abdomen showed B/L small renal cortical cysts, a small 2.5 mm right renal calculus. Ultrasonography scrotum & testis revealed a large calcified lesion measuring 23mm in superior relation to the right testis (Figure 1) ; likely epididymal origin. ?? (tubercular). Tiny calcified specks of left testis S/O testicular microlithiasis.



Fig-1: (a) Ultrasound picture showing large calcified lesion in superior relation to right testis. (b) Gross appearance of the specimen consisting of testis, epididymus and spermatic cord. Cut section of testis shows a calcified nodule with areas of necrosis

Routine blood investigations were within normal limits (WNL). Testicular tumor markers: AFP, Beta-HCG & LDH were also WNL. Urine - Routine Examination was normal.

Patient was operated via right inguinal approach and right testis delivered out through the incision after applying a vascular clamp on the spermatic cord at the level of internal inguinal ring. The testicular swelling was hard, with only a rim of soft tissue palpable at the periphery. Sample for frozen section was taken from the hard tissue which showed only amorphous material and few RBC's with no viable cells. Right high orchidectomy was planned as the testicular swelling was mainly replaced by stony hard

growth with only a small rim of normal testicular tissue with prior consent of the patient. Post operatively patient was discharged in satisfactory condition & advised follow up in OPD.

The cut section of the specimen (Figure 1b) showed a calcified nodule with areas of necrosis. Histopathology (figure 2a and 2b) revealed a circumscribed lesion composed of mature bony trabeculae lining marrow space, mainly composed of adipose tissue & focally showing hematopoietic elements. Large areas of necrosis seen. No evidence of tumor seen with features in favor of calcified nodule-testis.

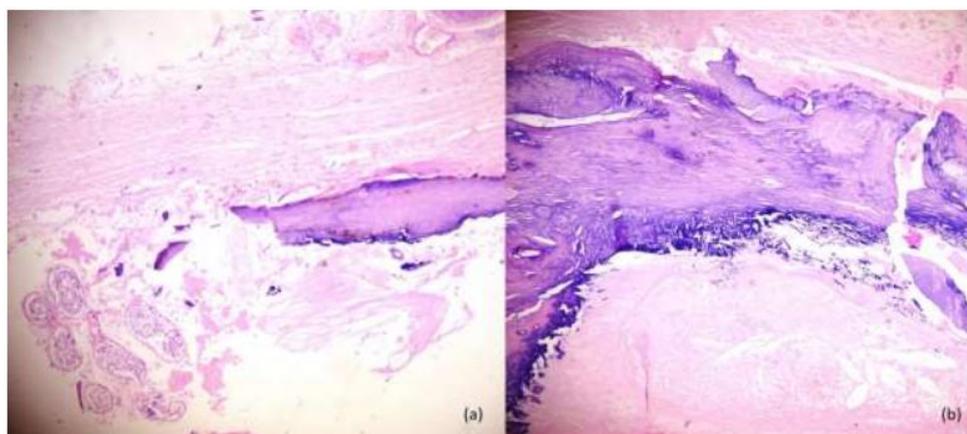


Fig-2: a) Photomicrograph of lesion consisting of fibrous tissue overlying mature bony trabeculae and foci of dystrophic calcification. Few normal seminiferous tubules are also seen (H&E 40X) b) higher magnification of the part of nodule showing fibrosis, dystrophic calcification and mature bone trabeculae (H&E 100X)

DISCUSSION

Testicular calcification can either be seen in the form of testicular microcalcification or as extratesticular calcified nodule. Further, it may be focal or diffuse and may occur in a testicular tumor, infarcts, old haemorrhages and granulomatous infections such as tuberculosis. Testicular calcifications may also be associated with nonseminomatous germ cell tumors [1]. Testicular microlithiasis may be associated with conditions like cryptorchidism, infertility, testicular atrophy, or pulmonary alveolar microlithiasis [2-4]. The question whether the patients with calcified lesions in the testis have an increased for development of testicular tumors remains unresolved

Our case is having a dystrophic large calcified nodule under tunica vaginalis pushing the testicular tissue to one side. Extratesticular calcification may be due to meconium peritonitis, long standing hydrocele associated with hemorrhage or infection [5-6]. In our case there is no history of hydrocele or infection, however, our patient had been an old case of pulmonary tuberculosis, but on histopathological examination no granulomatous lesion had been detected and all the

tumor markers were negative. So the cause for formation of a calcified nodule remains a dilemma.

CONCLUSION

This is a rare case of dystrophic testicular calcification which may also be termed as a testicular macrocalcification of 23 mm in size has not been reported. Hope this case report will help us to think further about calcified lesions in testis.

REFERENCES

1. Schwerk WB, Schwerk WN, Rodeck G. Testicular tumors: prospective analysis of real-time US patterns and abdominal staging. *Radiology*. 1987 Aug;164(2):369-74.
2. Janzen DL, Mathieson JR, Marsh JJ, Cooperberg PL, del Rio P, Golding RH, Rifkin MD. Testicular microlithiasis: sonographic and clinical features. *AJR. American journal of roentgenology*. 1992 May;158(5):1057-60.
3. Höbarth K, Susani M, Szabo N, Kratzik C. Incidence of testicular microlithiasis. *Urology*. 1992 Nov 30;40(5):464-7.
4. Backus ML, Mack LA, Middleton WD, King BF, Winter 3rd TC, True LD. Testicular

microlithiasis: imaging appearances and pathologic correlation. *Radiology*. 1994 Sep;192(3):781-5.

5. Linkowski GD, Avellone A, Gooding GA. Scrotal calculi: sonographic detection. *Radiology*. 1985 Aug;156(2):484-.
6. Berdon WE, Baker DH, Becker J, De Sanctis P. Scrotal masses in healed meconium peritonitis. *New England Journal of Medicine*. 1967 Sep 14;277(11):585-7.