



UNIVERSITY of
ROCHESTER
MEDICAL CENTER

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DEPARTMENT OF IMAGING SCIENCES

Imaging Sciences Interesting Cases

CASE 59

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CLINICAL PRESENTATION: A 40-year-old male presented with three days of testicular swelling and pain.

IMAGING FINDINGS: Scrotal ultrasound showed multiple, non-shadowing, echogenic foci scattered throughout the testicular parenchyma.



Figure 1: Transverse ultrasound image of left testicle.



Figure 2: Sagittal ultrasound image of left testicle.

DIAGNOSIS: Testicular Microlithiasis

DISCUSSION: Testicular microlithiasis (TM) occurs in 0.6% of patients referred for scrotal ultrasound. Sonographically they appear as multiple, non-shadowing echogenic foci, measuring 1-3 mm, randomly scattered throughout the testicular parenchyma. Pathologically, TM is characterized by calcifications within the lumina of affected seminiferous tubules. It is usually a bilateral finding, and can affect the testicle to varying degrees. Five or more foci per transducer field is the accepted diagnostic criteria for testicular microlithiasis.

TM is associated with several conditions, including Klinefelter’s syndrome, Down’s syndrome, male pseudohermaphroditism, previous radiotherapy, cryptorchidism, infertility, and most importantly testicular neoplasia. TM has been associated with testicular neoplasia in 18% to 75% of cases, with the largest series reporting a frequency of 40%. Follow-up includes regular testicular examination including self-examination. Some authors recommend imaging evaluation with ultrasound at 6 month or yearly intervals.

REFERENCES:

1. Kocakoc E, Bhatt S, Dogra V. Ultrasound evaluation of testicular neoplasms. *Ultrasound Clinics*, 2007;2: 27-44.
2. Ganem JP. Testicular microlithiasis. *Curr Opin Urol*. 2000 Mar;10(2):99-103. [PubMed]