

TESTICULAR MICROLITHIASIS

Zafer TURKYİLMAZ¹
Suleyman YESİL²
Abdurrahman AZZAM³
Kaan SONMEZ⁴

Testicular microlithiasis (TM) is a condition characterized by calcium deposits within the seminiferous tubules of the testis. The clinical significance of testicular microlithiasis (TM) remains unclear and poses a strategic challenge for clinicians. The natural course of TM is unknown, with the development of ultrasound technology. TM is defined as hyperechogenic foci in the testis parenchyma of varying degrees and diffusely spreading in the testis, often bilaterally, on ultrasound. The echogenic shadow typically seen in renal lithiasis or calcifications is absent in TM(1-10).

In this respect, the testis should be examined with high-frequency (12–17 MHz) linear transducer ultrasonography and multiple longitudinal and transverse gray-scale images. TM was classified as classic (five or more microliths per field of view) or limited (fewer than five microliths per field of view), It has been graded as minimal/mild (grade I: 5–10microliths), moderate (grade II: 10–20 microliths), and severe (grade III: > 20 microliths) depending on the microliths count as seen in any single view.The use of electron microscopy has provided

¹ Prof. MD, Gazi University Faculty of Medicine, Department of Pediatric Surgery, zafetrk@yahoo.com, ORCID iD: 0000-0003-3464-9628

² Prof. MD, Gazi University Faculty of Medicine, Department of Urology, syesil2003@yahoo.com, ORCID iD: 0000-0002-0437-9615

³ MD, Gazi University Faculty of Medicine, Department of Pediatric Surgery, abdurrahmantartik@gmail.com, ORCID iD: 0000-0001-9749-0998

⁴ Prof. MD, Gazi University Faculty of Medicine, Department of Pediatric Surgery, kamez@yahoo.com, ORCID iD: 0000-0002-3914-7128

asymptomatic children without risk factors and incidentally detected TM in ultrasonography do not need to be followed up and further research is not needed. Monthly self-examination is recommended for children with TM with risk factors such as cryptorchidism, starting from adolescence, without the need for additional examination. During the transition from pediatric urology to adult urology, especially TM patients with sub-fertility problems and risk factors may benefit from more intensive follow-up and referral to an adult urologist may be indicated for this group when they reach 18 years of age. Briefly, TM is not associated with testicular malignancy in children(13). In the adult population TM in combination with a history of cryptorchidism, sub/infertility or a previous history of testicular tumors is associated with an increased risk for testicular malignancy(13).

Routine monthly self-examination of the tests is only recommended in children with contributing risk factors from puberty onwards. When TM is still present with accompanying risk factors during transition to adulthood a more intensive follow-up with ultrasound and even biopsy could be considered.

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