

## Case Report

# Testicular Microlithiasis - The Need for Follow-Up in Pediatric Age

Andreia Preda<sup>1\*</sup>, Joana Ester Batista<sup>2</sup>, Catarina Barros Azevedo<sup>2</sup>, Cláudia P. Gonçalves<sup>3</sup> and Alicia Rebelo<sup>2</sup>

<sup>1</sup>Department of Pediatrics, Unidade Local de Saúde Gaia Espinho, Vila Nova de Gaia, Portugal

<sup>2</sup>Department of Pediatrics, Unidade Local de Saúde do Alto Ave, Guimarães, Portugal

<sup>3</sup>Department of Pediatrics, Unidade Local de Saúde de Braga, Braga, Portugal

### Abstract

Testicular microlithiasis is characterized by the presence of micro calcifications in the lumen of the seminiferous tubules. Its natural course is not yet fully understood, particularly in pediatric age, which justifies the need for early detection and follow-up.

**Keywords:** Pediatric Age; Scrotal Pain; Testicular Microlithiasis; Testicular Ultrasound

### Introduction

Testicular pain is one of the most common reasons for undergoing imaging exams for clarification in pediatric patients. Testicular microlithiasis is rare and it is typically an incidental finding in an ultrasound performed for another reason, particularly testicular pain. This condition is characterized by the presence of micro calcifications in the lumen of the seminiferous tubules [1]. It is predominantly bilateral, and can affect any age group. Although it can present as an isolated condition, it may also occur in association with benign or malignant pathology of the testicle [2].

In adults, it is reported an association between testicular microlithiasis and testicular cancer, as well as infertility and other conditions. [3] The natural course of the disease is not fully understood, and there are few studies in the pediatric age group.

**\*Corresponding author:** Andreia Preda, Department of Pediatrics, Unidade Local de Saúde Gaia Espinho, Vila Nova de Gaia, Portugal; Email: adp1016@gmail.com

**Citation:** Preda A, Batista JE, Azevedo CB, Gonçalves JP, Rebelo A (2024) Testicular Microlithiasis - The Need for Follow-Up in Pediatric Age. J Clin Stud Med Case Rep 11: 221.

**Received:** January 18, 2024; **Accepted:** January 29, 2024; **Published:** February 5, 2024

**Copyright:** © 2024 Preda A, et al. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

Annual clinical and ultrasound follow-up is recommended in cases of isolated testicular microlithiasis. If the patient presents risk factors (undescended testicle, testicular atrophy, or other testicular pathologies) or has a family history of testicular neoplasia, referral to pediatric surgery consultation is advised [4].

### Case Report

A 12-year-old male adolescent, previously healthy, was admitted to the pediatric emergency department because of left-sided scrotal pain ongoing for eight hours. Fever, vomiting or nausea, and lower urinary tract symptoms were denied. The patient described improvement in pain after taking a non-steroidal anti-inflammatory drug.

There was no history of trauma, intense physical exertion or sexual activity.

The patient exhibited mild to moderate restriction on walking due to pain. On physical examination, the patient reported tenderness on palpation of the left testis. There were no signs of scrotal swelling or redness and the cremasteric reflex was present. No other relevant data was detected during the physical examination.

Scrotal Ultrasound with Doppler was performed and revealed thickening of the cephalic region of the left epididymis and testis as well as signs of hyper vascularization, which indicated epididymitis, along with apparent associated signs of orchitis. It was also described the presence of numerous echogenic micro foci consistent with microlithiasis. The urine analysis did not reveal signs of infection.

The patient was discharged with anti-inflammatory medication, rest and a follow-up appointment scheduled. There was a complete resolution of the orchioepididymitis.

Currently, this patient remains under clinical and ultrasound surveillance. Repeated ultrasounds continue to show microlithic foci on the left testis, which are also present on the right one. The patients is asymptomatic.

### Discussion

Testicular microlithiasis is mostly an asymptomatic incidental finding on ultrasound. Its prevalence has risen due to the widespread use of ultrasound in patients with scrotal complaints.

The authors highlight the need for clinical and ultrasound follow-up because, although being a benign condition, there is a possible association with other pathologies such as testicular neoplasms, spermatic cord torsion and infertility.

### References

1. Balawender K, Orkisz S, Wisz P (2018) Testicular microlithiasis: What urologists should know. A review of the current literature. Cent Eur J Urol. 71: 310-314.
2. Sag S, Elemen L, Masrabaci K, Gungormez EK (2022) Is testicular microlithiasis associated with testicular pathologies in children?. Pediatr Surg Int. 38: 1317-1319.

3. Akhter W, Khan SAA, Khan FR, Younis A, Khan SMJZ (2012) Testicular microlithiasis: Case report and literature review. African J Urol. 18: 38-40.
4. Kola B (2017) Pediatric Testicular Microlithiasis: To Refer or Not to Refer? Glob Pediatr Heal. 4: 10-12.



- Advances In Industrial Biotechnology | ISSN: 2639-5665
- Advances In Microbiology Research | ISSN: 2689-694X
- Archives Of Surgery And Surgical Education | ISSN: 2689-3126
- Archives Of Urology
- Archives Of Zoological Studies | ISSN: 2640-7779
- Current Trends Medical And Biological Engineering
- International Journal Of Case Reports And Therapeutic Studies | ISSN: 2689-310X
- Journal Of Addiction & Addictive Disorders | ISSN: 2578-7276
- Journal Of Agronomy & Agricultural Science | ISSN: 2689-8292
- Journal Of AIDS Clinical Research & STDs | ISSN: 2572-7370
- Journal Of Alcoholism Drug Abuse & Substance Dependence | ISSN: 2572-9594
- Journal Of Allergy Disorders & Therapy | ISSN: 2470-749X
- Journal Of Alternative Complementary & Integrative Medicine | ISSN: 2470-7562
- Journal Of Alzheimers & Neurodegenerative Diseases | ISSN: 2572-9608
- Journal Of Anesthesia & Clinical Care | ISSN: 2378-8879
- Journal Of Angiology & Vascular Surgery | ISSN: 2572-7397
- Journal Of Animal Research & Veterinary Science | ISSN: 2639-3751
- Journal Of Aquaculture & Fisheries | ISSN: 2576-5523
- Journal Of Atmospheric & Earth Sciences | ISSN: 2689-8780
- Journal Of Biotech Research & Biochemistry
- Journal Of Brain & Neuroscience Research
- Journal Of Cancer Biology & Treatment | ISSN: 2470-7546
- Journal Of Cardiology Study & Research | ISSN: 2640-768X
- Journal Of Cell Biology & Cell Metabolism | ISSN: 2381-1943
- Journal Of Clinical Dermatology & Therapy | ISSN: 2378-8771
- Journal Of Clinical Immunology & Immunotherapy | ISSN: 2378-8844
- Journal Of Clinical Studies & Medical Case Reports | ISSN: 2378-8801
- Journal Of Community Medicine & Public Health Care | ISSN: 2381-1978
- Journal Of Cytology & Tissue Biology | ISSN: 2378-9107
- Journal Of Dairy Research & Technology | ISSN: 2688-9315
- Journal Of Dentistry Oral Health & Cosmesis | ISSN: 2473-6783
- Journal Of Diabetes & Metabolic Disorders | ISSN: 2381-201X
- Journal Of Emergency Medicine Trauma & Surgical Care | ISSN: 2378-8798
- Journal Of Environmental Science Current Research | ISSN: 2643-5020
- Journal Of Food Science & Nutrition | ISSN: 2470-1076
- Journal Of Forensic Legal & Investigative Sciences | ISSN: 2473-733X
- Journal Of Gastroenterology & Hepatology Research | ISSN: 2574-2566
- Journal Of Genetics & Genomic Sciences | ISSN: 2574-2485
- Journal Of Gerontology & Geriatric Medicine | ISSN: 2381-8662
- Journal Of Hematology Blood Transfusion & Disorders | ISSN: 2572-2999
- Journal Of Hospice & Palliative Medical Care
- Journal Of Human Endocrinology | ISSN: 2572-9640
- Journal Of Infectious & Non Infectious Diseases | ISSN: 2381-8654
- Journal Of Internal Medicine & Primary Healthcare | ISSN: 2574-2493
- Journal Of Light & Laser Current Trends
- Journal Of Medicine Study & Research | ISSN: 2639-5657
- Journal Of Modern Chemical Sciences
- Journal Of Nanotechnology Nanomedicine & Nanobiotechnology | ISSN: 2381-2044
- Journal Of Neonatology & Clinical Pediatrics | ISSN: 2378-878X
- Journal Of Nephrology & Renal Therapy | ISSN: 2473-7313
- Journal Of Non Invasive Vascular Investigation | ISSN: 2572-7400
- Journal Of Nuclear Medicine Radiology & Radiation Therapy | ISSN: 2572-7419
- Journal Of Obesity & Weight Loss | ISSN: 2473-7372
- Journal Of Ophthalmology & Clinical Research | ISSN: 2378-8887
- Journal Of Orthopedic Research & Physiotherapy | ISSN: 2381-2052
- Journal Of Otolaryngology Head & Neck Surgery | ISSN: 2573-010X
- Journal Of Pathology Clinical & Medical Research
- Journal Of Pharmacology Pharmaceutics & Pharmacovigilance | ISSN: 2639-5649
- Journal Of Physical Medicine Rehabilitation & Disabilities | ISSN: 2381-8670
- Journal Of Plant Science Current Research | ISSN: 2639-3743
- Journal Of Practical & Professional Nursing | ISSN: 2639-5681
- Journal Of Protein Research & Bioinformatics
- Journal Of Psychiatry Depression & Anxiety | ISSN: 2573-0150
- Journal Of Pulmonary Medicine & Respiratory Research | ISSN: 2573-0177
- Journal Of Reproductive Medicine Gynaecology & Obstetrics | ISSN: 2574-2574
- Journal Of Stem Cells Research Development & Therapy | ISSN: 2381-2060
- Journal Of Surgery Current Trends & Innovations | ISSN: 2578-7284
- Journal Of Toxicology Current Research | ISSN: 2639-3735
- Journal Of Translational Science And Research
- Journal Of Vaccines Research & Vaccination | ISSN: 2573-0193
- Journal Of Virology & Antivirals
- Sports Medicine And Injury Care Journal | ISSN: 2689-8829
- Trends In Anatomy & Physiology | ISSN: 2640-7752

Submit Your Manuscript: <https://www.heraldopenaccess.us/submit-manuscript>