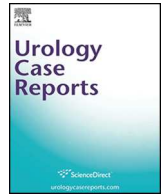




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Inflammation and infection

Epididymal filariasis a rare presentation of testicular pain

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Introduction

Testicular pain is a common presentation to the Emergency Department worldwide. In the geriatric population it is often recognized that testicular torsion is less likely. Because of this infective and malignant causes are often considered. Consideration of tropical diseases in the setting of global population and history of overseas travel is pertinent.

We present the case of a 74-year-old Chinese man who presented to the emergency department with scrotal pain and was identified to have epididymal filariasis.

This case represents a rare presentation of epididymitis but one that could be considered in the setting of international travel.

Case report

A 74-year-old Chinese male with non small cell lung cancer, previous low grade urothelial cancer of the bladder with regular surveillance clear and benign prostate hyperplasia presented with a two week history of progressively worsening right testicular pain to the Emergency Department. The pain was constant in nature and radiating from the pelvis to the groin. He denied any dysuria, haematuria or worsening of his usual lower urinary tract symptoms of poor stream, hesitancy and terminal dribbling. He denied any history of subjective fevers or rigors. He denied any history of previous vasectomy. His background history in relation to his non small cell lung cancer consisted of previous radiotherapy and palliative cisplatin chemotherapy. He was also taking slow release 20mg morphine capsules twice a day for his pain and dexamethasone 4mg daily for his palliative non small cell lung cancer. On further questioning it was revealed that a recent history of overseas travel to China was pertinent.

Physical examination revealed an enlarged right testicle with tenderness on palpation of the epididymis.

Biochemical analysis revealed haemoglobin 104g/L, white cell count $10.5 \times 10^9/L$, Neutrophils $8.81 \times 10^9/L$, platelet count 405×10^9 , serum sodium 135mmol/L, serum potassium 3.9mmol/L and creatinine 59umol/L.

Urinalysis showed $> 500 \times 10^6/L$ Leucocytes $60 \times 10^6/L$ Erythrocytes and $< 10 \times 10^6/L$ Epithelial cells with an eventual culture of mixed skin flora. The sample was also sent for acid-fast bacilli which was eventually reported as negative. A testicular ultrasound was organized and revealed a filarial dance sign present within the head of the right epididymis suspicious for scrotal filariasis (Figs. 1–3).

Following radiological diagnosis the infectious diseases physicians were consulted and recommended treatment with Sulfamethoxazole and Trimethoprim, 800mg and 160mg respectively, twice a day for 14 days with ultrasound follow up in both the infectious diseases and urology outpatients. Follow up ultrasound revealed interval improvement of the echogenic foci in the epididymis. Subsequent review demonstrated resolution of his testicular pain and the echogenic foci.

Discussion

Moving echogenic particles have always been described as the “filarial dance”. It is a characteristic sonographic appearance that was first reported in 1994.¹ There is suggestion that mobile echogenicities also occur without evidence of filarial infection.² More recently it has been suggested that the moving echogenic particles can also represent clumps of agglutinated sperm within dilated ducts.^{2,3} This can occur in patients that have undergone vasectomy. However, there are conflicting reports on this with some studies reporting as high as 70% or as low as 12.5% of patients having undergone vasectomy with the filarial dance sign.^{4,5} The one thing that was common among patients with the filarial dance sign was that their epididymis was obstructed. Therefore it is likely that patients with echogenic particles could be a result of filarial infection, post-vasectomy factors or chronic epididymo-orchitis.

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Fig. 1. Ultrasound image of Epididymal Filariasis with the Filariasis marked.

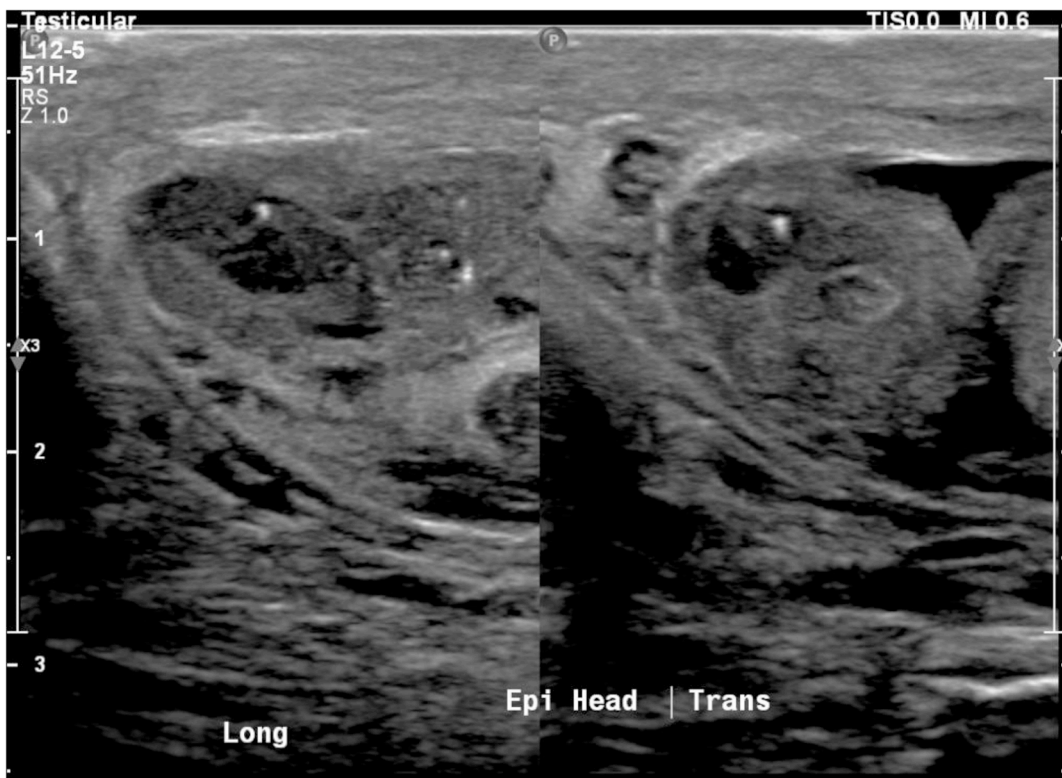


Fig. 2. Ultrasound image of Epididymal Head containing evidence of Filariasis.

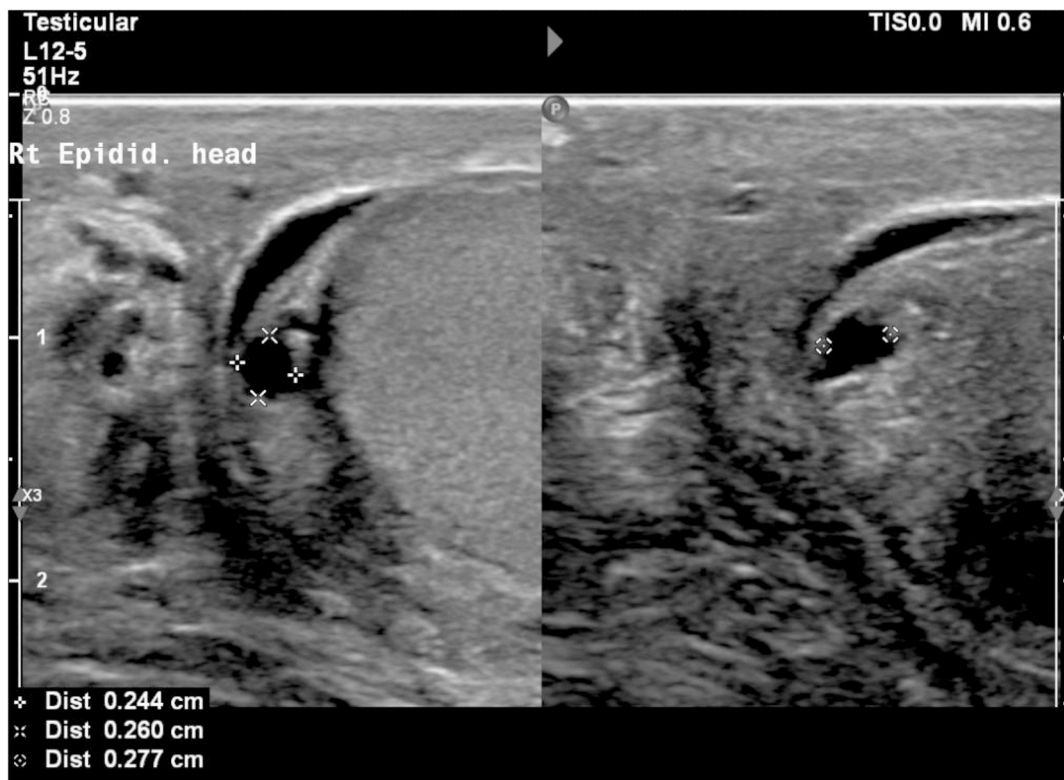


Fig. 3. Ultrasound image of Epididymal Cyst containing evidence of Filariasis.

Conclusion

This case demonstrates the interesting and rare presentations of international travelers in the setting of immunocompromised patient with testicular pain. Involvement of Infectious Diseases physicians assists in the appropriate treatment and management of tropical diseases. This allowed for a favorable outcome to the patient who recovered well and the pain resolved with medical treatment.

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