

Brucella Epididymoorchitis: A Case Detected in Tc-99m MDP Bone Scintigraphy

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Turk J Nucl Med, 2002; 11 (3): 159-161

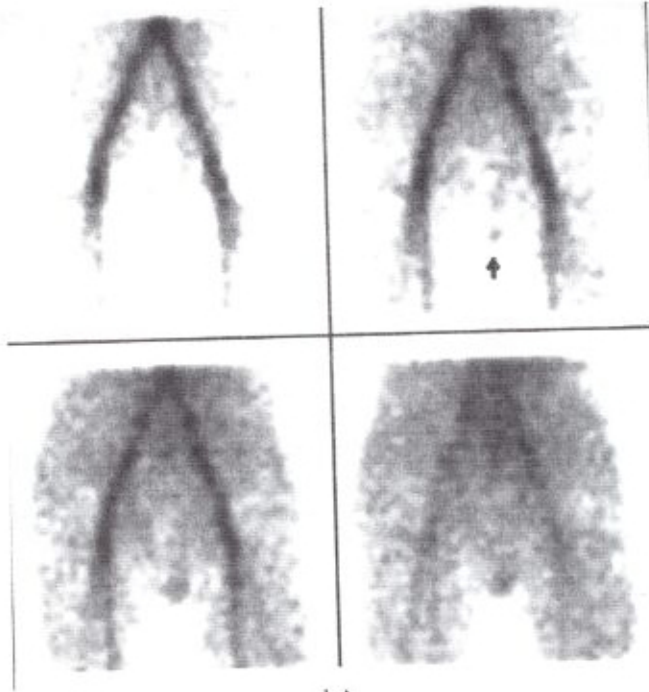
ABSTRACT: A 20-year-old male patient with acute brucellosis and low back pain was asked for a bone scintigraphy. A three-phase bone scanning was performed. The bone scintigraphy revealed increased blood flow and hyperemia in the region of left scrotum. His clinical findings and the ultrasonographic examination of the scrotum confirmed the diagnosis of left epididymoorchitis.

Key Words: Brucellosis, Scintigraphy, Orchitis

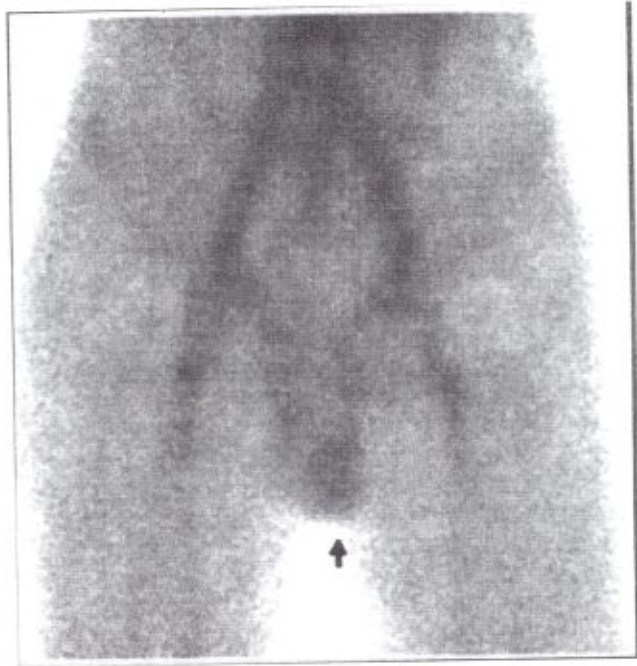
Legends for Illustrations

Fig 1: A three phase bone scintigraphy was performed using Tc-99m-MDP in a patient with complaints of low back pain and mild pain in his knees and ankle joints. The patient was suffering from acute brucellosis. His white-cell count, erythrocyte sedimentation rate, serum anti-streptolysin-O (ASO) and C-reactive protein levels were 7400 per mm³, 16 mm/hour, 300 Todd units and 48 mg/l, respectively. His rheumatoid factor was negative and brucella agglutination test was positive with agglutination titre of >1/1280. Bone scintigraphy revealed increased blood flow images show increased blood flow and hyperemia in the region of left scrotum: (a) Anterior 2 sec/frame serial dynamic blood flow images show increased blood flow to the region of left scrotum (arrow). (b) Anterior blood pool static image shows focal

hyperemia in the region of left scrotum (arrow). Patient had accompanying complaints of scrotal pain and swelling. Ultrasonographic examination of the scrotum revealed and enlarged left epididymis showing heterogenicity and increased blood flow to the left testis and epididymis. Both the findings of physical and ultrasonographic examination were interpreted as being due to left epididymoorchitis. Careful interpretation of blood flow and blood pool phases during bone scintigraphy led to the diagnosis of epididymoorchitis. Epididymoorchitis, as a focal form of brucella infection is reported in 2%-20% of patients with brucellosis (1).



1-A



1-B

References

1. Navarro-Martinez A, Solera J, Corrediora J, et al. Epididymoorchitis due to *Brucella mellitensis*: A retrospective study of 59 patients. *Clin Infect Dis* 33:2017,2001.