

Case Report – The Forgotten Disease: Hip Brucellosis Arthritis

¹Yap WK, ¹Shahir A, Arnee W, ¹Firdaus A, ¹Hudzairy A

¹Orthopaedic Department Hospital Sultanah Nora Ismail, Batu Pahat, Johor

INTRODUCTION

Brucellosis is a systemic infection involving many organs and tissues. It is caused by an intracellular Gram-negative bacterium, which often has low mortality but high morbidity.¹ Infection is transmitted to humans from animals as a consequence of occupational exposure or ingestion of contaminated milk products. The diagnosis can often be difficult as it can present in many non-specified clinical and radiological manifestations. Therefore we present a case of Brucella arthritis of the hip in order to improve the accuracy of diagnosis.

CASE REPORT

Patient is a 17 years old girl who was admitted to hospital multiple times for pyrexia of unknown origin and left hip pain. On examination, the left hip was tender and kept in a flexed position. Blood investigations showed a normal total white cell trend, however there were marked raised of C-reactive protein. X-ray of the hip was normal. Ultrasound of the left hip joint showed no joint effusion. Blood culture was negative initially. Despite normal empirical antibiotic for septic arthritis was given, patient still developed on and off fever and the left hip pain didn't subside. After multiple blood culture has taken, in the end one of the results grew *Brucellosis spp.* Further history retrospectively elicited that patient had history of consuming unpasteurized goat milk prior to the illness. Patient was then started with IM Streptomycin, Tab Rifampicin and Tab Doxycycline for two weeks and discharge with oral antibiotic for four weeks. Upon review in clinic, patient had recovered well with no more pain over the left hip. Patient was able to ambulate freely without any aid.

DISCUSSIONS

Radiological manifestations of Brucella arthritis can be as follows: (1) Bone sclerosis with small irregular cystic bony destruction and joint narrowing. (2) Osteomyelitis with extensive soft

tissue exudative inflammation. CT is superior to X-ray in detecting the cystic bony lesion and MRI has greater advantages showing the lesions in adjacent soft tissue.² However the diagnosis of Brucellosis is difficult as the above findings are not specific to Brucellosis. The definitive diagnosis of Brucellosis still rely on isolation of the pathogen, though clinical diagnosis usually relies only on serologic analysis.³

CONCLUSION

A data collected by Lancet shows that there are actually no endemic/no reported cases of Brucellosis in Southeast Asia region.⁴ We believe that this may not be true since our clinical setting lacks the diagnostic test of serologic analysis of *Brucellosis spp.* Therefore it is often difficult to diagnose a case of Brucellosis. Hence a high index of suspicion, detailed social history and along with other clinical findings and radiological findings is crucial in diagnosing Brucellosis. If untreated properly, the sequelae of Brucellosis can be disastrous.

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