Acute osteomyelitis of calcaneum secondary to meliodosis

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INTRODUCTION

B.pseudomallei is an environmental bacterium, surviving in soil and surface water. It gains entrance to the body most commonly through percutaneous inoculation, although inhalation and ingestion one of the possible routes. The major risk factors for the disease are diabetes mellitus, hazardous alcohol use, chronic renal disease and chronic lung disease¹. Ceftazidime is the treatment of choice for severe melliodosis, but the response is slow⁶. Maintainence or eradication therapy for prolonged period is necessary to prevent relapse and recurrence¹. Monitoring IgG antibody levels may be useful as a guideline to determine the duration of eradication therapy¹.

REPORT:

58-year-old lady with underlying type II diabetes mellitus and hypertension. She presented with right foot and ankle pain 5 days prior to admission. These are associated with redness. swelling and painful weight bearing. She had history of dry cough for a month and was treated as upper respiratory tract infection with one course of azithromycin a week prior to admission. Clinically she is not in sepsis and her right foot appears swollen, erythema and tender over posterolateral ankle and dorsum part of the foot. Her ROM of ankle is good with neurovascular findings are normal. There is no palpable lymph node at adjacent limb. Systemic review is unremarkable . She was treated as foot cellulitis and intravenous antibiotic ceftriaxone were administered for 1 week. The swelling has been improved, however the tenderness and eryhthematous of right ankle is persisted.

The infective blood parameters of C-reactive protein shown improving trend but her white

blood count on the higher site. Right ankle x-ray is normal with no bony involvement. MRI of right ankle was done as patient's weight bearing pain still persisted. MRI findings shown multifocal intramedullary lesions within the calcaneus consistent findings of osteomyelitis.Surgical debridement, curettage of the bone lesion and tissues and bone sample were revealed gram negative *burkholderia pseudomallei*. She has completed 6 weeks IV ceftazidime. Her progress was good and was discharge with penicillin group antibiotic and completed for 6 months duration.

Figure 1: pre and intraoperative



Figure 2: MRI and X-RAY of right foot



CONCLUSION:

Septic arthritis and osteomyelitis due to *B. pseudomallei* is rare but highly suspicion should be considered while managing infection related cases especially in tropical country like Malaysia.

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