Case report: Melioidosis presenting as urinary tract infection

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Introduction
Melioidosis, caused by Burkholderia pseudomallei can present with a spectrum of diseases ranging from mild wound infections to severe pneumonia or deep seated abscesses. Genitourinary melioidosis is one of these manifestations.

Case report
A 71 year old non-diabetic male with a history of bladder out-flow obstruction was admitted with acute retention of urine following fever and dysuria for one week. He had worked at the Fisheries Department and had no significant soil exposure history.

On examination, the patient was febrile and had prostatomegaly. The white cell count (WCC) was 22.8x10⁹ /L with 80% neutrophils and the CRP was 131 mg/L. Urine full report showed 8-10 pus cells/HPF. Ultrasound scan showed mild prostatic enlargement with no evidence of abscess formation or pyelonephritis.

Urine culture was positive for a non-lactose fermenting, oxidase positive, Gram negative bacillus which was suspected to be B. pseudomallei, due to the typical antibiotic sensitivity pattern of co-amoxiclav sensitivity and gentamicin resistance. The identity of the isolate was confirmed by latex agglutination. Melioidosis antibodies were positive with a titre of >10240. Blood culture was negative.

Initial treatment was with intravenous ceftazidime 1g/8 hourly, increased to 2g/8 hourly after confirmation of the diagnosis. Oral doxycycline 100mg/12 hourly and oral cotrimoxazole 960mg/12 hourly were added. Fever decreased with reduction of CRP and WCC. After 17 days there was still a mild elevation of CRP and treatment was changed to meropenem for three weeks, after excluding other septic foci. The patient was discharged on oral cotrimoxazole for eight weeks.

Discussion
Melioidosis is an emerging disease in Sri Lanka which requires a high index of suspicion for diagnosis due to the absence of distinctive clinical features. Though this patient had no predisposing conditions, working in the Fisheries Department could have been a risk factor. Diagnosis was made through accurate identification of the urine culture isolate in spite of urine being an unusual specimen to be culture positive in melioidosis in Sri Lanka. This case strengthens the clinical significance of B. pseudomallei as a urinary pathogen.

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