

# MELIOIDOSIS PRESENTING AS EPIDIDYMO-ORCHITIS

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## ABSTRACT

We report a rare case of suppurative epididymo-orchitis caused by *Pseudomonas pseudomallei* in a 56-year-old male. This is a gram negative bacillus found mainly in tropical zones. Diagnosis was reached by culture of the organisms after drainage of the scrotal abscess, and the patient was treated by a course of oral chloramphenicol 500mg qid for 6 months.

**Keywords:** *pseudomonas pseudomallei*, epididymo-orchitis

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## INTRODUCTION

Melioidosis is an infection caused by the gram negative bacillus, *Pseudomonas pseudomallei*. It is a rare infection occurring in the tropics. We report a rare presentation of this infection.

## CASE REPORT

A 56-year-old gentleman presented to us with acute retention of urine. He gave a history of prostatism for the past 6 months. A Foley's catheter was inserted and he was sent home to return seven days later for a transurethral resection of the prostate. He returned prematurely 6 days later complaining of pain in both testes and fever. The initial urine culture grew *Escherichia coli*. He was a diabetic on oral hypoglycaemics and a retired tractor driver in an oil palm estate. He had been well before this episode.

The patient was febrile with a temperature of 38°C. The only remarkable physical finding was bilaterally enlarged tender and warm testes. The left side of the scrotum was also fluctuant and an aspirate revealed thick brownish pus. Gram stain showed gram negative bacilli. We made a diagnosis of bilateral epididymo-orchitis from an ascending infection as a result of prolonged catheter drainage.

A formal incision and drainage of the left scrotal abscess was performed under anaesthesia and the patient was started on intravenous gentamicin. A second urine culture was sent and the culture of the pus yielded *Pseudomonas pseudomallei* sensitive to chloramphenicol but resistant to gentamicin. He was started on chloramphenicol at a dose of 4 gm daily in divided doses. Three days later he formed some pus in the right side of the scrotum and this was aspirated. It also grew the same organism. The patient's fever settled and he was discharged well after a transurethral resection of the prostate. He was sent home with chloramphenicol to complete a six-month course.

## DISCUSSION

Melioidosis is an uncommon infection caused by the Gram negative bacillus, *Pseudomonas pseudomallei*. This infection exists mainly in Southeast Asia and Northern Australia and presents in various ways, the most common of which are pulmonary infections, localised abscesses in the skin, liver, spleen and septic arthritis<sup>(1,2)</sup>. The organism is found in soil

and stagnant water in tropical climates<sup>(3,4)</sup> and is acquired through minor breaks in the skin or via the respiratory tract.

Genitourinary tract infection is uncommon and usually is haematogenous in origin<sup>(2,5)</sup>. Primary urinary tract infections are uncommon. In our patient the portal of entry was probably his catheter, and the urinary tract infection subsequently resulted in bilateral suppurative epididymo-orchitis via an infection through the vas and epididymis. We have found two other documented cases of primary epididymo-orchitis due to *Pseudomonas pseudomallei* in the literature<sup>(5,6)</sup>. Genital inoculation has even been postulated in Australian aborigines<sup>(7)</sup>.

Most patients who develop melioidosis have an underlying disease such as diabetes mellitus, liver cirrhosis, tuberculosis or renal failure which cause some degree of immunosuppression<sup>(1,2)</sup>. Our patient had diabetes mellitus. Although *Pseudomonas pseudomallei* is a common soil organism in the tropics, the clinical form of the disease is rare. Five to twenty-nine percent<sup>(8-10)</sup> of the population in endemic areas show serologic positivity implying previous exposure but overt disease is unusual.

*Pseudomonas pseudomallei* strains in Malaysia are generally sensitive to standard drugs like chloramphenicol, tetracycline and cotrimoxazole with occasional exceptions<sup>(1)</sup>. Therapy is usually recommended for four to six months to eradicate the disease and to prevent its recrudescence<sup>(2)</sup>. Awareness of the disease and its recognition are essential for proper therapy.

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