

Melioidosis presenting as 'Cold Abscess': a case report

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Citation

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Abstract

Melioidosis incidence has been constantly increasing in the last decade, owing to the increasing number of immunocompromised in the community. The dire complications associated and the wide spectrum of manifestations mimicking a great range of diseases make this infection a special one in every clinician's experience. Only a high degree of suspicion owing to its natural history can help in saving these patients from the mortality and the morbidity of the disease. Here we describe one such case where an abscess is misdiagnosed to be a cold tubercular abscess and how the mistake is rectified with a prompt from an alert microbiologist.

INTRODUCTION

Although melioidosis is uncommonly diagnosed, recent data indicate that the disease as such is not uncommon. In clinical practice the diagnosis is more serendipitous rather than by exclusion or by logic based on symptoms and signs. With its increasing prevalence in South Asia, comparable to South-East Asia where the disease is more common, it is being commonly diagnosed in most parts of the world. The broad spectrum of presentations, with lack of availability of laboratory technology and unawareness of the condition among many medical practitioners might be responsible for the recorded low incidence in rest of the world. It is a chronic suppurative infection seen commonly among the immunocompromised patients whose occupation is usually farming. Here we discuss a case of melioidosis to point out how it is commonly misdiagnosed and how the physicians are taken aback by the diagnosis with a complete surprise, if they are not prepared.

CASE REPORT

A 45-year-old male with a history of type II diabetes mellitus, a tailor by occupation, presented in the outpatient department with the history of swelling in the neck bilaterally occupying the level III lymph nodal position. There was a history of pain in the region but no history of fever. On examination there was no localized raise of temperature but both swellings were fluctuant and non-transilluminant. A clinical diagnosis of cold abscess was made and pus aspirated and sent for culture and sensitivity. Meanwhile the patient was admitted and planned for incision and drainage under general anesthesia. Culture had grown

Burkholderia pseudomallei. As the condition is uncommon in local residents, the literature was reviewed and the patient was investigated in terms of systemic involvement. Blood counts were normal and ultrasound of the abdomen showed no intraabdominal abscess. Chest radiographs were normal. The patient was taken up for incision and drainage along with local debridement. Intraoperatively, it was found that from subcutaneous tissue to the deep fascia all the tissue layers were necrosed. No drain was placed and the patient was started on IV ceftazidime for 10 days followed by oral co-trimoxazole for 30 days. Daily wound care was given. The wound healed satisfactorily and the patient was discharged on advice to follow-up regularly in the OPD. One month postoperatively, the wound had healed completely.

Figure 1

Figure: Clinical picture of the patient with abscesses in the neck bilaterally [blue arrow marks]



DISCUSSION

Burkholderia pseudomallei is a gram-negative bacterium responsible for a chronic suppurative infection in susceptible individuals. It is transmitted during contact with *B. pseudomallei* contaminated soil or water through exposure of abraded skin, inhalation and possibly ingestion. The wide spectrum of presentation of the condition from abscess to fulminant sepsis with unknown incubation period plays a major role in the diagnosis of the disease. The incubation period among travelers varies, depending on the route of exposure, from 1-5 days in localized forms to 10-14 days in the pulmonary form [1]. Immunocompromised patients, especially those with diabetes mellitus and HIV infection, with a background of farming seem to be prone to this condition [2]. Many isolated case reports of melioidosis with abscess in unusual sites such as neck, liver, spleen, adrenal gland and prostate gland have been reported [3]. The antibiotic of choice for melioidosis is ceftazidime and has been found to be more effective than other third generation cephalosporins. A randomized trial found reduction in mortality on using a combination of ceftazidime and co-

trimoxazole [4]. In patients with abscesses, resolution can take more than a month, necessitating initial parenteral treatment followed by oral therapy for 20 weeks [5]. Despite adequate antibiotic therapy, this condition is associated with high mortality rates. The overall mortality reported from Thailand is as high as 50% [5].

In our case, a diagnosis of cold abscess was made initially and aspiration of the pus was done in a non-dependent area. When the culture had grown *Burkholderia pseudomallei*, the patient was immediately taken for incision and drainage, which is relatively contraindicated in the case of cold abscess. But the drainage of the abscess is of prime importance in the management of melioidosis for the fear of progression to a fulminant course. As cold abscesses are more common than abscesses due to melioidosis, which are not encountered by most of the faculties in our institute, we presume the delay was justified as there are no rapid tests available at present. After wound incision and drainage had been done in a non-dependant area and the abscess wall had been removed, the incision site was left open and the site was managed with daily dressings. The patient was immediately started on ceftazidime injections and co-trimoxazole. At present the wound is healthy and granulating well.

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