Septicaemic Pulmonary Melioidosis with Cutaneous Pustules

Sir,

A 51 year old diabetic man who worked as a ranger in a wildlife reserve in Jelebu, Negeri Sembilan, was admitted because of fever and non-productive cough which had started 8 days earlier. He was initially treated at a district hospital, followed by an admission to the general hospital of another state. When he became progressively breathless and developed widespread skin pustules he was transferred to a private medical centre, where a chest radiograph (Fig 1) was taken and revealed extensive, bilateral nodular opacities which were confluent in certain areas without evidence of cavitation or pleural effusion. He was treated as staphylococcal pneumonia with intravenous cloxacillin and netilmicin. He was transferred to this hospital when his condition continued to worsen.

On admission, he was very ill with a temperature of 40°C. Multiple cutaneous pustules were present on his face, trunk and limbs (Fig 2). He was tachypnoeic and crackles were heard over both lungs. Hypoxaemia, with a PaO₂ of 76 mm Hg, was present when he was receiving oxygen at 10 l/min through a face mask. Gram staining of pus from one of the cutaneous pustules revealed small gram-negative bacilli. At this point in time, Pseudomonas pseudomallei pneumonia with septicaemia was considered a likely diagnosis and intravenous ceftazidime at 2 gm tds and intravenous trimethoprim-sulphamethoxazole (cotrimoxazole) at 1920 mg bd was promptly commenced after 2 blood specimens and pus from one of the cutaneous pustules had been taken for culture. Culture of pus and the blood cultures both grew Ps pseudomallei that was sensitive to ceftazidime, chloramphenicol and cotrimoxazole. His clinical condition improved dramatically, and by the third day he was afebrile.

Fig 1: Chest radiograph showing extensive bilateral nodular opacities.
Intravenous ceftazidime and cotrimoxazole was administered for a total duration of 14 days. By this time, the chest radiograph revealed almost complete resolution of the lung infiltrates and the skin lesions had all dried up. Orally-administered cotrimoxazole at 1920 mg bd and chloramphenicol at 500 mg qds was continued for a further 2 weeks. Subsequently, cotrimoxazole alone at 1920 mg bd was continued for another 2 months. He remained well at the time of writing this letter.

Diabetes mellitus, and his occupation as a ranger, probably predisposed this patient to acquire meliodosis. Acute septicaemic pulmonary meliodosis may mimic staphylococcal pneumonia and is associated with a high mortality when there is delay in starting appropriate antimicrobial therapy. This case illustrates the importance of a high index of suspicion and Gram staining of pus from the skin pustules which leads to the early diagnosis of septicaemic meliodosis and timely commencement of effective treatment which resulted in a favourable outcome for the patient. Ceftazidime is the antibiotic of choice for this severe form of the disease.

C.K. Liam, MRCP
Department of Medicine, University Hospital Faculty of Medicine, University of Malaya, 59100 Kuala Lumpur

References