

## Two Pediatric Cases of Melioidosis

Principal Investigators: Richard M. Lampe, MAJ, MC  
Chirapun Duangmanee, M.D.  
Pisipong Patamasukon, M.D.<sup>1</sup>

**BACKGROUND:** SEATO Medical Research Laboratory has carried out extensive research on the geographic distribution of *Pseudomonas pseudomallei* in soil and water throughout Thailand. Large scale surveys have been conducted in search of clinical cases and serologic evidence of infection. From 1964–1970 only two clinical cases of melioidosis were detected (See Annual Reports 1965–1970). Two brothers ages 26 and 16 had *Pseudomonas pseudomallei* isolated from their sputa by guinea pig inoculation techniques. Both patients had respiratory symptoms and chest x-rays consistent with a diagnosis of pulmonary melioidosis.

**PROGRESS:** During Jan and Feb 1974 two cases of melioidosis were seen at Bangkok Children's Hospital.

### Case 1

**History:** A 10 year old Thai female presented with fever, weight loss and generalized weakness of 5 months duration.

**Physical Examination:** T 38.8°C, pulse 116/min, Res. rate 28/min, BP 100/60 mmHg., Wt 14 Kg. The patient was pale, lethargic, and had edema of both upper palpebrae. A soft tissue (2 cm) mass was noted at the glabella and two (3 cm) soft occipital masses were present. The patient was extremely emaciated. No other significant physical findings were noted.

**Laboratory Findings:** Hgb 4 gm%, WBC 17, 800, Diff. 83%N 17%L. Chest x-ray revealed right lower lobe pneumonia with 2 cm abscess cavity in the right middle lobe.

**Clinical Course:** The patient died 14 hours after admission to the hospital while receiving high doses of penicillin parenterally. Post mortem examination revealed abscesses in spleen, pancreas, liver and lung. The gross and microscopic findings were consistent with systemic melioidosis. *Pseudomonas pseudomallei* was isolated from blood, glabella, soft tissue abscess and bone marrow.

### Case 2

**History:** A 15 month old Thai female presented with fever and cough of 3 weeks duration. Hemoptysis was observed on the day of admission.

**Physical examination:** T 38.8°C, pulse 110/min, Res. rate 64/min, Wt 6.5 kg. There was marked dyspnea, and coarse rales were heard in both lungs.

**Laboratory Findings:** Hgb 7.5 gm%, WBC 58,400, 83%N 11%L, 6%M. Chest x-ray revealed bilateral pulmonary infiltration predominantly involving the upper lobes.

**Clinical Course:** *Pseudomonas pseudomallei* was cultured from a percutaneous lung aspirate. The child died 48 hours after admission despite parenteral administration of chloramphenicol and penicillin. No autopsy was performed. The identification of both isolates of *Pseudomonas pseudomallei* was confirmed at the Walter Reed Army Institute of Research.

**DISCUSSION:** These two cases of melioidosis in the pediatric age group are the first ones recognized at Children's Hospital. Reports of clinical melioidosis in Thailand are rare. Clinical awareness of the disease and supporting bacteriological laboratory facilities are necessary to make the diagnosis. The finding of more cases of melioidosis at Children's Hospital may elucidate the epidemiology, clinical presentation and natural course of melioidosis in Thailand.

---

<sup>1</sup> Children's Hospital, Bangkok, Thailand