

RHEUMATOLOGICAL MANIFESTATIONS IN PATIENTS WITH MELIOIDOSIS

P Teparrakkul¹, JJ Tsai^{2,3,4}, W Chierakul^{4,5}, JF Gerstenmaier⁴, T Wacharaprechasgu^{1,6}, W Piyaphanee⁴, D Limmathurotsakul⁵, W Chaowagul¹, NP Day^{5,7} and SJ Peacock^{5,7}

¹Medical Department, Sappasithiprasong Hospital, Ubon Ratchathani, Thailand;

²Division of Infectious Diseases, Department of Internal Medicine, Kaohsiung Medical University Hospital; ³Faculty of Medicine, College of Medicine, Kaohsiung Medical University, Taiwan;

⁴Department of Clinical Tropical Medicine and ⁵Mahidol-Oxford Tropical Medicine Research Unit, Faculty of Tropical Medicine, Mahidol University, Bangkok, Thailand;

⁶Radiological Department, Sappasithiprasong Hospital, Ubon Ratchathani, Thailand;

⁷Center for Clinical Vaccinology and Tropical Medicine, Nuffield Department of Clinical Medicine, University of Oxford, Churchill Hospital, Oxford, UK

Abstract. Melioidosis, an infection caused by the bacterium *Burkholderia pseudomallei*, has a wide range of clinical manifestations. Here, we describe rheumatological melioidosis (involving one or more of joint, bone or muscle), and compare features and outcome with patients without rheumatological involvement. A retrospective study of patients with culture-confirmed melioidosis admitted to Sappasithiprasong Hospital, Ubon Ratchathani during 2002 and 2005 identified 679 patients with melioidosis, of whom 98 (14.4%) had rheumatological melioidosis involving joint ($n=52$), bone ($n = 5$), or muscle ($n = 12$), or a combination of these ($n=29$). Females were over-represented in the rheumatological group, and diabetes and thalassemia were independent risk factors for rheumatological involvement (OR; 2.49 and 9.56, respectively). Patients with rheumatological involvement had a more chronic course, as reflected by a longer fever clearance time (13 vs 7 days, $p = 0.06$) and hospitalization (22 vs 14 days, $p < 0.001$), but lower mortality (28% vs 44%, $p = 0.005$). Patients with signs and symptoms of septic arthritis for longer than 2 weeks were more likely to have extensive infection of adjacent bone and muscle, particularly in diabetic patients. Surgical intervention was associated with a survival benefit, but not a shortening of the course of infection.

Correspondence: Prapit Teparrakkul, Medical Department, Sappasithiprasong Hospital, Ubon Ratchathani, Thailand.

Tel: +6645 246112

E-mail: prapith_11@hotmail.com

Wirongrong Chierakul, Department of Clinical Tropical Medicine and Mahidol-Oxford Tropical Medicine Research Unit, Faculty of Tropical Medicine, Mahidol University, Bangkok, Thailand.

Tel: +66 (0) 2203-6328; Fax: +66 (0) 2354-9169

E-mail: tmwcr@mahidol.ac.th