

# An Audit of Patients with Rheumatic Disease Requiring Medical Intensive Care

B Y H Thong,\**MBBS, MRCP (UK)*, D Y H Tai,\*\**FAMS, MRCP (UK), EDIC*, S K Goh,\*\**FAMS, MRCP (UK), M Med (Int Med)*,  
A Johan,\*\*\*\**FAMS, MRCP (UK), FCCP*

## Abstract

**Introduction:** Medical intensive care for patients with rheumatic disease is usually complicated by significant morbidity and mortality. The aims of this study were to examine the reasons for admission, the outcomes of these patients and the possible prognostic factors in an Asian cohort. **Materials and Methods:** This was a retrospective study of the case records of 29 admissions to the medical intensive care unit (MICU) of Tan Tock Seng Hospital (TTSH) from August 1999 to August 2000. **Results:** There were 28 patients admitted, of whom 1 had a repeat admission. The majority of these patients were young (mean age  $38.9 \pm 16.3$  years) and 71.4% were females. Twenty patients (71.4%) had systemic lupus erythematosus (SLE). The main reasons for admission were infection/ sepsis syndrome ( $n = 18$ ), hypotension ( $n = 16$ ) and acute respiratory failure ( $n = 14$ ). The observed in-hospital mortality was 64.3%, which was higher than the predicted risk of hospital death of 47.3%. Infection contributed to 55.6% of deaths. The patients who died had a longer mean duration of the rheumatic disease, higher APACHE II scores, higher rates of hypertension and hyperlipidaemia, higher doses of steroid and immunosuppressive therapy and more organ failures. Renal failure and acute respiratory distress syndrome were the two most common organ failures in patients who died. **Conclusion:** Many of our critically-ill patients with rheumatic disease were young females with good functional status. Despite the high mortality, they should be aggressively treated because infection and acute respiratory failure are potentially reversible.

*Ann Acad Med Singapore 2001; 30:254-9*

**Key words:** APACHE II, Immunocompromised, Infection, Prognostic factors, Systemic lupus erythematosus

---

\* Registrar

Department of Rheumatology, Allergy & Immunology

\*\* Consultant and Director, Medical Intensive Care Unit

\*\*\* Consultant

Department of General Medicine

\*\*\*\* Consultant

Department of Respiratory Medicine

Tan Tock Seng Hospital

Address for Reprints: Dr Bernard Thong Yu Hor, Department of Rheumatology, Allergy & Immunology, Tan Tock Seng Hospital, 11 Jalan Tan Tock Seng, Singapore 308433.

E-mail: [bernard\\_thong@notes.ttsh.gov.sg](mailto:bernard_thong@notes.ttsh.gov.sg)