OUTCOME OF PATIENTS WITH SYSTEMIC DISEASES ADMITTED TO THE MEDICAL INTENSIVE CARE UNIT OF A TERTIARY REFERRAL HOSPITAL: A SINGLE-CENTRE RETROSPECTIVE STUDY

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SUPPLEMENTARY MATERIAL

METHODS

Patients potentially suffering from systemic diseases (active or inactive) were identified through search of all records in the electronic Patient Data Management System (PDMS) used in our ICU. This generated a list of 336 ICU-admissions for 167 patients. Each individual patient file was revised, differential diagnoses were verified using accepted criteria, and 86 patients with a confirmed systemic disease were included. The study cohort represented 3% of the total number of patients admitted to the medical ICU during that period.

If a patient was readmitted to the ICU within 48 hours after discharge, data from both admissions were analysed together. When a patient was readmitted to the ICU during the study time period more than 48 hours after discharge, only data of the first ICU admission were analysed. Follow-up after discharge was obtained for all patients until January 2013.

This study was approved by the Ethics Board of our institution.

Data collection and definitions

Collected patient data are listed in [table 1](#) and [table 2](#). For the APACHE II score, the worst value within 48h after admission was used [1]. Immunosuppressive treatment was considered relevant if the patient was treated with at least 8 mg of methylprednisolone (or an equivalent dose of a different corticosteroid), or with any other immunomodulating drug in any dose (in particular methotrexate, cyclophosphamide, azathioprine, mycophenolic acid, tacrolimus or rituximab), and this at least in the last three months prior to admission to ICU.

We considered three main categories of admission: 1) infection, 2) disease-related organ failure, 3) not related to the underlying systemic disease nor caused by an infection. In a number of patients more than one category of admission was present.

Statistical analysis

Statistical analyses were performed using Stat View 5.0 software (SAS Institute, Caryn NC). Chi-square comparisons, Fisher's exact test or Mann-Whitney U test were used where appropriate. A multivariable logistic regression analysis was performed for ICU mortality and in-hospital mortality, using a clinically relevant selection of independent variables. APACHE II score substituted all collinear parameters (need for dialysis, mechanical ventilation and immune suppression). For all analyses, a two-tailed p-value of <0.05 was considered significant.

Reference

1. Knaus WA, Draper EA, Wagner DP, Zimmerman JE. APACHE II - A Severity of Disease Classification-System. Critical Care Medicine 1985;13(10):818-829.