LEPTOSPIROSIS: CLINICAL PROFILE AND OUTCOME IN CRITICAL CARE SETTINGS IN SRI LANKA

Kanchana Bandara¹, Manjula Weerasekara¹, Chinthika Gunasekara¹, Nilantha Ranasinghe², Chamil Marasinghe³, Nilanka Perera³, Anura Gunapala⁴, Tharanga Liyanarachchi⁴, Priyantha Jayalath⁵, Neluka Fernando¹

¹. Department of Microbiology, Faculty of Medical Sciences, University of Sri Jayawardenepura, Sri Lanka 2. Base Hospital Tangalle 3. Department of Medicine, Faculty of Medical Sciences, University of Sri Jayawardenepura 4. Colombo South Teaching Hospital, Kalubowila, 5. Base Hospital, Panadura

Introduction

Leptospirosis can vary from mild subclinical disease to severe disease including multiple organ failure requiring intensive care treatment. Case fatality of severe leptospirosis may exceed 40%.

Objective

To determine the clinical profile and outcome of severe leptospirosis in critical care settings in Sri Lanka.

Methodology

All patients suspected of leptospirosis admitted to the Intensive Care Units of selected hospitals were included.  Lab diagnosis was done using a rapid IgM immunochromatographic assay and polymerase chain reaction.

Results

Of the 20 patients 19 were male. The mean ICU stay was 5 days. Fifteen were presumptively diagnosed as leptospirosis using the modified Faine’s criteria; 15 patients were IgM positive and 4 were confirmed by PCR. However, one patient was negative for IgM and PCR although he has fulfilled the Faine's criteria. The most common complications were myocarditis (35%), renal failure (30%), liver failure (30%), hypotension/shock (30%), meningitis (25%), disseminated intravascular coagulation (10%) and multiple organ failure (40%). One death was reported due to meningoencephalitis. Artificial ventilation was provided to 25% of patients. Leptospira interrogans and L. borgpetersenii were identified in this group of patients.

Conclusion

The commonest complication of severe leptospirosis was myocarditis. Mortality rate in our study (5%) was low compared to the reported literature.