ABSTRAK

Latar Belakang: Sepsis adalah keadaan darurat medis yang melibatkan respons imunologis sistem tubuh terhadap infeksi, yang dapat menyebabkan disfungsi organ dan kematian. Syok sepsis, sebagai bentuk parah dari sepsis, memiliki tingkat mortalitas yang tinggi. Vitamin D diketahui memiliki peran penting dalam modulasi imun dan inflamasi, yang dapat mempengaruhi hasil klinis pada pasien sepsis.

Tujuan: Penelitian ini bertujuan untuk mengevaluasi korelasi antara kadar serum vitamin D dengan mortalitas pada pasien syok sepsis di RSUP Dr. Sardjito.

Metode: Penelitian ini merupakan studi kohort prospektif yang melibatkan 22 sampel pasien syok sepsis. Kadar vitamin D serum diukur saat pasien masuk ICU, dan mortalitas dicatat selama 28 hari. Skor SAPS-3 digunakan untuk menilai keparahan penyakit. Analisis statistik dilakukan untuk menentukan hubungan antara kadar vitamin D, skor SAPS-3, dan mortalitas.

Hasil: Dari 22 sampel pasien, 15 pasien (68,18%) memiliki kadar vitamin D normal-insufisiensi, sementara 7 pasien (31,82%) mengalami defisiensi ringan-berat. Mortalitas tercatat sebesar 27,27% (6 pasien). Analisis menunjukkan bahwa pasien dengan defisiensi vitamin D memiliki odds ratio (OR) sebesar 8,6667 untuk mortalitas dibandingkan dengan pasien dengan kadar vitamin D normal-insufisiensi (95% CI: 1,0495 hingga 71,5719; p=0.026). Selain itu, terdapat korelasi negatif yang signifikan antara kadar vitamin D dan skor SAPS-3 (OR=7,1111; 95% CI: 1,0888 hingga 46,4425; p=0.0001)

Kesimpulan: Penelitian ini menunjukkan bahwa defisiensi vitamin D berkorelasi dengan peningkatan risiko mortalitas pada pasien syok sepsis.

Kata Kunci: Mortalitas, Sepsis, Skor SAPS-3, Syok Sepsis, Vitamin D

ABSTRACT

Background: Sepsis is a medical emergency involving the body system's immunologic response to infection, which can lead to organ dysfunction and death. Sepsis shock, as a severe form of sepsis, has a high mortality rate. Vitamin D is known to have an important role in immune and inflammatory modulation, which may affect clinical outcomes in sepsis patients.

Objective: This study aims to evaluate the correlation between serum vitamin D levels and mortality in sepsis shock patients at Dr. Sardjito Hospital.

Methods: This study was a prospective cohort study involving 22 sepsis shock sample patients. Serum vitamin D levels were measured when patients entered the ICU, and mortality was recorded for 28 days. SAPS-3 score was used to assess disease severity. Statistical analysis was performed to determine the relationship between vitamin D levels, SAPS-3 score, and mortality.

Results: Of the 22 sample patients, 15 patients (68.18%) had normal-insufficient vitamin D levels, while 7 patients (31.82%) had mild-severe deficiency. Mortality was recorded at 27.27% (6 patients). Analysis showed that patients with vitamin D deficiency had an odds ratio (OR) of 8.6667 for mortality compared to patients with normal-insufficient vitamin D levels (95% CI: 1.0495 to 71.5719; p=0.026). In addition, there was a significant negative correlation between vitamin D levels and SAPS-3 score (OR=7.1111; 95% CI: 1.0888 to 46.4425; p=0.0001

Conclusion: This study shows that vitamin D deficiency correlates with an increased risk of mortality in sepsis shock patients.

Keywords: Mortality, Sepsis, SAPS-3 Score, Septic Shock, Vitamin D.