

PELOD SCORES AS A PREDICTOR OF MORTALITY IN CHILDREN WITH SEPTIC SHOCK IN SARDJITO GENERAL HOSPITAL

ABSTRACT

BACKGROUND: Patients experiencing septic shock have risk of organ system dysfunction. High Pediatric End Logistic Organ Dysfunctions (PELOD) score is associated with higher risk of death in children with sepsis, but has not been reported in children with septic shock.

OBJECTIVE: To determine whether PELOD score more than 20 at the time of diagnosis is a predictor of mortality in the first 48 hours in children with septic shock.

METHODS: A retrospective cohort study was conducted in patients aged 1 month to 18 years who were diagnosed as septic shock in Dr. Sardjito General Hospital between January 1, 2008 and September 30, 2013. Data was collected by reviewing the medical records. Patients were divided into two groups, PELOD score ≥ 20 and PELOD score <20 , and were followed up for 48 hours. Data were analyzed with SPSS 17.0.

RESULTS: One hundred twenty-six patients were recruited to the study, 71 boys and 55 girls. Patients with PELOD score ≥ 20 at the time of diagnosis were 85, while PELOD score <20 were 41. Patients who had PELOD score ≥ 20 have higher risk of death compared to those with PELOD score <20 (RR:3.81; 95% CI 2.86 to 7.86; $p < 0,001$).

CONCLUSION: PELOD score ≥ 20 at the time of diagnosis of septic shock is a predictor of mortality in the first 48 hours in pediatric septic shock patients at Dr. Sardjito General Hospital.

KEYWORDS: PELOD score, predictor, mortality, septic shock

SKOR PELOD SEBAGAI FAKTOR PREDIKTOR KEMATIAN PADA PASIEN ANAK DENGAN SYOK SEPTIK DI RSUP DR. SARDJITO

INTISARI

LATAR BELAKANG: Pasien syok septik berisiko mengalami disfungsi sistem organ. Skor *Pediatric Logistic Organ Dysfunction* (PELOD) yang tinggi dihubungkan dengan peningkatan risiko kematian pada pasien sepsis. Penelitian pada pasien syok septik belum pernah dilakukan.

TUJUAN: Untuk mengetahui apakah skor PELOD ≥ 20 pada saat terdiagnosis syok septik merupakan prediktor kematian dalam 48 jam pertama pada pasien anak.

METODE: Penelitian kohort retrospektif dilakukan pada pasien berusia 1 bulan sampai ≤ 18 tahun yang terdiagnosis syok septik di RSUP Dr. Sardjito antara 1 Januari 2008 dan 30 September 2013. Penelitian dilakukan pada bulan Desember 2013 sampai Januari 2014. Pasien syok septik dibagi menjadi dua kelompok, skor PELOD ≥ 20 dan skor PELOD < 20 kemudian diikuti selama 48 jam untuk melihat luaran kematian. Data dianalisis dengan SPSS 17.0.

HASIL: Seratus dua puluh enam pasien diikuti dalam penelitian, 71 laki-laki dan 55 perempuan. Pasien syok septik dengan skor PELOD ≥ 20 sebanyak 85, sedangkan skor PELOD < 20 sebanyak 41. Pasien syok septik yang memiliki skor PELOD ≥ 20 memiliki risiko kematian lebih tinggi dibandingkan pasien dengan skor PELOD < 20 (RO: 18,0; IK 95% 7,1-46,0; $p=0,00$).

KESIMPULAN: Skor PELOD ≥ 20 pada saat terdiagnosis syok septik merupakan prediktor kematian dalam 48 jam pertama pada pasien anak di RSUP Dr. Sardjito.

KATA KUNCI: skor PELOD, prediktor, kematian, syok septik