Efektivitas Deresusitasi dengan Target Tekanan Vena Sentral 0–4 mmHg Pasca-Resusitasi Renjatan Sepsis: Kajian terhadap Densitas Perfusi Kapiler, Stadium AKI, Indeks Curah Jantung, Lama Penggunaan Ventilator, dan Lama Rawat ICU = Effectiveness of Deresuscitation with Target Central Venous Pressure of 0â4 mmHg post Septic Shock Resuscitation on Perfused Vascular Density, AKI Stage, Cardiac Index, Ventilator Duration, and ICU Length of Stay

Yohanes Wolter Hendrik George, author

Abstrak

Kelebihan beban cairan pascaresusitasi dihubungkan dengan luaran buruk sehingga diperlukan deresusitasi. Tekanan vena sentral (TVS) rendah penting untuk menjamin aliran balik darah, meningkatkan curah jantung dan memperbaiki perfusi jaringan. Penelitian ini bertujuan menilai efektivitas deresusitasi dengan target TVS 0–4 mmHg pada pasien pascaresusitasi renjatan sepsis di ICU. Penelitian menggunakan desain randomized controlled trial dan dilakukan di RSUPN dr. Cipto Mangunkusumo pada bulan September 2019–Oktober 2020. Subjek berusia 18–60 tahun dengan renjatan sepsis pascaresusitasi. Kriteria eksklusi adalah gangguan jantung primer, gagal jantung kanan, penyakit jantung bawaan, penyakit paru obstruksi menahun berat, efusi pleura berat, batu atau tumor ginjal dan gagal ginjal kronik. Subjek penelitian dibagi menjadi dua kelompok dengan target TVS 0–4 mmHg dan 8–10 mmHg dan dilakukan dideresusitasi. Target TVS dicapai dengan furosemid drip dan loading kristaloid. Parameter luaran adalah perbedaan hasil PVD, stadium AKI, indeks curah jantung, lama penggunaan ventilator, dan lama hari perawatan di ICU. Data dianalisis program SPSS versi 20.0 meliputi analisis deskriptif dan inferensial memakai uji yang sesuai. Dari 44 subjek, 1 subjek dikeluarkan karena menjalani hemodialisis karena gagal ginjal kronik pada kelompok dengan target TVS 8–10 mmHg. Karakteristik dasar pasien berupa stadium AKI, ureum, kreatinin dan nilai TVS inisial berbeda bermakna pada kedua kelompok. Deresusitasi dengan target TVS 0–4 mmHg tidak berbeda bermakna pada nilai PVD, perbaikan AKI, CI, lama penggunaan ventilator, dan perawatan ICU (p>0,05). Tiga subjek meninggal sebelum selesai follow up pada kelompok dengan target TVS 0–4 mmHg dan 6 subjek meninggal sebelum selesai follow up, pada kelompok dengan target TVS 8–10 mmHg. Simpulan: Tidak didapatkan perbedaan efektivitas antara target deresusitasi TVS 04 mmHg dengan target TVS 810 mmHg terhadap nilai PVD sublingual, perubahan stadium AKI KDIGO, indeks curah jantung, lama penggunaan ventilator, lama perawatan ICU

..... Post-resuscitation fluid overload is associated with a poor outcome in critically patient and thus requires deresuscitation (aggressive fluid removal). Low central venous pressure (CVP) is important to ensure the venous return, increase cardiac output and improve tissue perfusion. This study aims to assess the effectiveness of deresuscitation with a CVP target of 0–4 mmHg in post-septic shock resuscitation patients in the emergency department and ICU. This study used a randomized controlled trial design at RSUPN Dr. Cipto Mangunkusumo in September 2019–October 2020. The study sample was patients 18–60 years old with septic shock in the post-resuscitation ICU. Exclusion criteria were patients with primary heart failure, right heart failure, congenital heart disease, severe chronic obstructive pulmonary disease, severe pleural effusion, kidney stones or tumors, and chronic renal failure. The study subjects were deresuscited and

divided into two CVP target groups (0–4 mmHg and 8–10 mmHg). Furosemide drip and cristaloid were given to reach target of CVP. Outcome parameters were differences in PVD, AKI stage, cardiac index (CI), ventilator duration, and length of stay in ICU. Statistical analysis includes descriptive and inferential analysis testing the appropriate test. Data analysis was performed using the SPSS version 20.0 statistical program. Results: There were 44 subjects, 1 subject were excluded due to hemodialysis in CVP target of 8–10 mmHg. Baseline characteristics have significant difference in ureum, creatinine, AKI stage and initial CVP value between two groups. Deresuscitation with a CVP target of 0–4 mmHg did not have a significant difference in the value of PVD, improvement in AKI, CI, ventilator duration, and length of ICU stay ($p > 0.05$). Three subjects died before 7 days of follow up in CVP target of 0–4 mmHg and 3 subjects died before 7 days of follow up in CVP target of 8–10 mmHg.