Hubungan Kadar Natrium Urin 2 Jam Paska Pemberian Loop Diuretic terhadap Lama Masa Rawat dan Rawat Ulang dalam 30 Hari pada Pasien Gagal Jantung Dekompensasi Akut = Relationship of Urine Sodium Levels 2 Hours Post Administration of Loop Diuretic to Length of Stay and Readmission in 30 Days in Patients with Acute Decompensated Heart Failure

Fikri, author

Abstrak

Latar belakang: Di Indonesia gagal jantung telah menjadi masalah utama komunitas karena tingginya biaya perawatan, kualitas hidup yang rendah, dan kematian prematur. Hingga saat ini loop diuretic masih merupakan terapi utama pada pasien gagal jantung dekompensasi akut (GJDA) dengan klinis kongesti. Respon diuresis dapat diukur secara objektif melalui pengukuran natrium urin. Natrium urin yang rendah atau tetap rendah setelah pemberian loop diuretic dapat menunjukkan derajat gagal jantung yang lebih berat. Penelitian ini bertujuan untuk mengetahui respon natriuresis 2 jam paska pemberian loop diuretic serta hubungannya terhadap lama masa rawat dan rawat ulang dalam 30 hari.

Metode: Dilakukan pengukuran kadar natrium dalam urin sebelum dan 2 jam paska pemberian loop diuretic pada pasien gagal jantung dekompensasi akut, lalu diobservasi lama masa rawat dan kejadian rawat ulang dalam 30 hari paska rawat pada masing-masing kelompok kadar natrium urin rendah dan kadar natrium urin tinggi.

Hasil: Dari 51 pasien yang diuji, rerata usia adalah 52.62 ± 13.72 tahun, mayoritas laki-laki (78.4%). Mayoritas sampel juga menerima obat-obatan gagal jantung selama perawatan. Sebanyak 40 (78,4%) orang menerima obat gagal jantung golongan ACE inhibitor/ARB dan 36 (70,4%) orang menerima obat golongan beta-blocker. Kadar natrium urin 2 jam pasca pemberian loop diuretic berkorelasi moderat dengan lama masa rawat yang semakin singkat ($p< 0.05$), ditemukan perbedaan signifikan dengan median lama masa rawat pada kelompok tingkat natrium rendah selama 7 (IQR 4 – 11) hari dan pada kelompok natrium tinggi selama 5 (IQR 2,25 – 6) hari. Sedangkan hubungan tingkat kadar natrium urin 2 jam pasca pemberian loop diuretic dengan rawat ulang dalam 30 hari tidak ditemukan perbedaan hubungan bermakna antara kedua variabel ini. Terdapat hubungan bermakna ($p < 0,05$) antara pengobatan beta-blocker dan ACE inhibitor/ARB rawat ulang dalam 30 hari. Pengobatan beta-blocker dan ACE inhibitor/ARB mengurangi risiko rawat ulang.

Kesimpulan: Terdapat hubungan antara kadar natrium urin 2 jam paska loop diuretic dengan lama masa rawat, dimana kadar natrium rendah memiliki lama masa rawat lebih panjang. Meskipun demikian, hal tersebut tidak berhubungan dengan kejadian rawat ulang dalam 30 hari.
.....Background: In Indonesia, heart failure has become a major community problem because of the high cost of care, low quality of life, and premature death. Until now, loop diuretics are still the main therapy in patients with acute decompensated heart failure (ADHF) with clinical congestion. Diuresis responsiveness

can be measured objectively by measuring sodium urine. Low sodium urine or remains low after loop diuretic administration may indicate a more severe degree of heart failure.This study aims to determine the response of natriuresis 2 hours after loop diuretic administration and its relationship to length of stay and readmission in 30 days.

Result: Among the 51 patients tested, the mean age was 52.62 ± 13.72 years, the majority were men (78.4%). The majority of the samples received heart failure drugs during treatment. A total of 40 (78.4%) people received ACE inhibitors/ARB and 36 (70.4%) received beta-blockers. Urinary sodium level 2 hours after loop diuretic administration was moderately correlated with shorter length of stay ($p < 0.05$), a significant difference was found with the median length of stay in the low sodium level group for 7 (IQR 4 – 11) days and in the sodium group. high for 5 (IQR 2.25 – 6) days. Meanwhile, the relationship between urinary sodium levels 2 hours after loop diuretic administration and hospitalization within 30 days was not found to be significantly different between these two variables. There was a significant relationship ($p < 0.05$) between beta-blocker and ACE inhibitors/ARB treatment and re-admission within 30 days. Beta-blocker and ACE inhibitors/ARB treatment reduced the risk of readmission.

Conclusion: There is a relationship between urinary sodium levels 2 hours after loop diuretic and length of stay, where low sodium levels have a longer length of stay. However, it is not related to the readmission incidence within 30 days