INTISARI

PROTEINURIA SEBAGAI FAKTOR RISIKO KEJADIAN *CONTRAST INDUCED ACUTE KIDNEY INJURY* (CI-AKI) PADA PASIEN YANG DILAKUKAN INTERVENSI KORONER PERKUTAN PRIMER (IKPP) DI RSUP DR SARDJITO

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Latar Belakang: *Contrast induced acute kidney injury* (CI-AKI) merupakan komplikasi serius dan tersering yang terjadi pada pasien yang menjalani intervensi koroner perkutan primer. Proteinuria diidentifikasi sebagai faktor risiko bebas terhadap kejadian CI-AKI dan juga kejadian kardiovaskular.
Tujuan Penelitian: Mengetahui proteinuria sebagai faktor risiko terhadap kejadian CI-AKI pada pasien yang dilakukan intervensi koroner perkutan primer di RSUP Dr. Sardjito.
Metode Penelitian: Penelitian ini menggunakan observasional analitik dengan metode kohort prospektif. Penelitian ini dilakukan di Unit Gawat Darurat (UGD), Instalasi Laboratorium Terpadu (ILT) dan *Cardiovascular Care Unit* (CVCU) RSUP dr. Sardjito Yogyakarta. Subjek penelitian ini yaitu pasien STEMI yang menjalani intervensi koroner perkutan primer dan memenuhi kriteria inklusi maupun eksklusi. Dilakukan pemeriksaan urinalisa rutin 12 jam setelah dilakukan tindakan IKPP. Proteinuria yang didapatkan pada pemeriksaan urinalisa merupakan variabel bebas. Analisis multivariat digunakan untuk mengetahui hubungan variabel bebas dan terikat dengan mempertimbangkan adanya variabel pengganggu.
Hasil Penelitian: Dari 58 subyek penelitian, 15 subyek (25%) mengalami CI-AKI. 12 subyek (40%) diantaranya mengalami proteinuria. Analisa bivariat menunjukkan hubungan yang bermakna antara proteinuria terhadap terjadinya CI-AKI ($p < 0,05$). Kelompok dengan proteinuria memiliki risiko terjadinya CI-AKI sebesar 3,73 kali. Analisis *Chi square* menunjukkan variabel pengganggu yang bermakna berpengaruh terhadap kejadian CI-AKI yaitu anemia, volume kontras, kategori EF, eGFR dan kreatinin. Analisis multivariat menunjukkan proteinuria berhubungan sebagai faktor risiko terhadap CI-AKI pada pasien paska tindakan intervensi koroner perkutan primer ($p < 0,03$; OR 4,84; CI 95% 1,14-20,59)
Kesimpulan: Proteinuria berhubungan sebagai faktor risiko terhadap kejadian CI-AKI pada pasien STEMI setelah tindakan intervensi koroner perkutan primer.

Kata kunci: *Contrast induced acute kidney injury* (CI-AKI), *Proteinuria, ST Elevation Myocard Infark* (STEMI), *Intervensi Koroner Perkutan Primer.*

ABSTRACT

PROTEINURIA AS A RISK FACTOR FOR CONTRAST INDUCED ACUTE KIDNEY INJURY (CI-AKI) AFTER PRIMARY PERCUTANEOUS CORONARY INTERVENTION AT DR SARDJITO HOSPITAL

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Background: Contrast induced acute kidney injury (CI-AKI) is a serious and common complication that occurs in patients undergoing primary percutaneous coronary intervention. Proteinuria was identified as an independent risk factor for the incidence of CI-AKI as well as cardiovascular events.
Objective: To determine proteinuria as a risk factor for the incidence of CI-AKI in patients undergoing primary percutaneous coronary intervention at Dr. Sardjito Hospital.
Methods: This study used observational analytic with prospective cohort method. This study was conducted in the Emergency Room (ER), Integrated Laboratory Installation (ILT) and Cardiovascular Care Unit (CVCU) RSUP dr. Sardjito Yogyakarta. The subjects of this study were STEMI patients who underwent primary percutaneous coronary intervention and met the inclusion and exclusion criteria. Routine urinalysis was carried out 12 hours after primary percutaneous coronary intervention was performed. Proteinuria obtained on urinalysis is an independent variable. Multivariate analysis was used to determine the relationship between independent and dependent variables by considering the presence of confounding variables.
Results: From total of 58 subjects, 15 subjects (25%) had CI-AKI. 12 subjects (40%) of them had proteinuria. Bivariate analysis showed a significant relationship between proteinuria and the occurrence of CI-AKI ($p < 0.05$). The group with proteinuria had 3.73 times the risk of CI-AKI. Chi square analysis showed that confounding variables that significantly influenced the incidence of CI-AKI were anemia, contrast volume, EF category, eGFR and creatinine. Multivariate analysis showed proteinuria was associated as a risk factor for CI-AKI in patients after primary percutaneous coronary intervention ($p < 0.03$; OR 4.84; 95% CI 1.14-20.59).
Conclusion: Proteinuria is associated as a risk factor for the incidence of CI-AKI in STEMI patients after primary percutaneous coronary intervention.

Keywords: *Contrast induced acute kidney injury* (CI-AKI), *Proteinuria, ST Elevation Myocard Infark* (STEMI), *Primary percutaneous coronary intervention.*