

## Faktor-Faktor Yang Memengaruhi Renal Outcome yang Buruk pada Pasien Nefritis Lupus di RSUPN Cipto Mangunkusumo = Factors influencing poor renal outcome in patients with lupus nephritis at Indonesian tertiary hospital

Angie Shabira Permata H, author

Deskripsi Lengkap: <https://lib.ui.ac.id/detail?id=20529166&lokasi=lokal>

---

### Abstrak

Latar belakang : Nefritis lupus (NL) memiliki renal outcome yang buruk meliputi, doubling serum kreatinin, atau penurunan laju filtrasi glomerulus (LFG) 50% terhadap baseline, atau gagal ginjal terminal. Baik penyakit ginjal kronik maupun gagal ginjal terminal berdampak pada masalah kesehatan global, mortalitas, hospitalisasi, dan beban pembiayaan kesehatan. Identifikasi faktor-faktor yang mempengaruhi renal outcome yang buruk pada nefritis lupus diharapkan meningkatkan pengelolaan pasien NL dan mencegah perburukan fungsi ginjal. Tujuan : Mengetahui faktor-faktor yang memengaruhi renal outcome yang buruk pada pasien NL di RSUPN Cipto Mangunkusumo. Metode : Studi kohort retrospektif dengan penelusuran rekam medis pasien nefritis lupus yang berobat ke RSCM periode Januari 2011-Juni 2019. Analisis bivariat dilakukan pada faktor anemia, proteinuria, fungsi ginjal, aktivitas penyakit LES baseline, rerata mean arterial pressure (MAP), obesitas, histopatologi, remisi, dan relaps terhadap renal outcome yang buruk pada nefritis lupus selama 3 hingga 5 tahun paska terdiagnosis, menggunakan metode Chi-square. Analisis multivariat dilakukan dengan metode binary regresi terhadap variabel dengan nilai  $p < 0,25$  pada analisis bivariat. Hasil : Didapatkan subjek sebanyak 128 pasien untuk diteliti. Renal outcome yang buruk berupa doubling serum kreatinin, atau penurunan LFG 50% terhadap baseline, atau gagal ginjal terminal selama follow-up didapatkan sebesar 25% dengan status obesitas (31,6%), rerata MAP 100 mmHg (45,2%), serum kreatinin baseline 0,9 mg/dl (21,4%), proteinuria baseline 3,5 g/24 jam (38,5%), anemia baseline (23,7%), gagal remisi (78,3%), relaps (48%), aktivitas penyakit LES derajat berat (25,9%), NL proliferatif (32,1%), indeks aktivitas 12 (80%), dan indeks kronisitas 4 (45,5%). Faktor-faktor yang memengaruhi renal outcome yang buruk pada pasien NL di RSCM meliputi rerata MAP 100 mmHg, proteinuria baseline 3,5 g/24 jam, dan gagal remisi dengan RR (IK 95%) masing-masing 2,241 (1,468-3,419),  $p < 0,001$ , 1,756 (1,283-2,403),  $p < 0,001$ , dan 5,438 (3,268-9,047),  $p < 0,001$ . Kesimpulan: Persentase renal outcome yang buruk pada pasien NL di RSCM sebesar 25% yang dipengaruhi rerata MAP 100 mmHg, proteinuria baseline 3,5 g/24 jam, dan, gagal remisi.

.....Background : Lupus nephritis (LN) is associated with poor renal outcomes, such as doubling serum creatinine, or reduced estimated glomerular filtration rate (eGFR) 50% from baseline, or end-stage renal disease. Either chronic kidney disease or end-stage renal disease (ESRD) affect the global health problem, mortality, hospitalization, and medical expenses. Identification of factors that influence poor renal outcome in lupus nephritis might increase the awareness in management of patient with lupus nephritis to reduce health burden due to worsening renal outcome. This study aims to identify factors that influence poor renal outcome in patient with lupus nephritis in an Indonesian tertiary hospital. Methods: Retrospective cohort study tracing medical records in patients with lupus nephritis during January 2011-June 2019. Chi-squared bivariate analysis was conducted among influencing factors; baseline anemia, proteinuria, renal function, disease activity, the time average of mean arterial pressure (MAP), obesity, histopathology, achieving

remission, and the occurrence of relapse. Binary regression is used in multivariate analysis for variables with  $p < 0,25$  in bivariate analysis. Results: This study consists of 128 patients with lupus nephritis. Poor renal outcome was defined by doubling serum creatinine or reduced eGFR  $< 50\%$  from baseline or end-stage renal disease. During the follow-up, poor renal outcome was found  $25\%$  among obesity ( $31,6\%$ ), the time average of mean arterial pressure (MAP)  $> 100$  mmHg ( $45,2\%$ ), baseline serum creatinine  $> 0,9$  mg/dl ( $21,4\%$ ), baseline proteinuria  $> 3,5$  g/24 h ( $38,5\%$ ), baseline anemia ( $23,7\%$ ), failure to achieve remission ( $78,3\%$ ), renal relapse ( $48\%$ ), severe disease activity ( $25,9\%$ ), proliferative histopathology ( $32,1\%$ ), activity index  $> 12$  ( $80\%$ ), and chronicity index  $> 4$  ( $45,5\%$ ). The time average of MAP  $> 100$  mmHg, baseline proteinuria  $> 3,5$  g/24 h, and failure to achieve remission influenced poor renal outcome in patients with LN consecutively with RR (95% CI) 2,241 (1,468-3,419),  $p < 0,001$ , 1,756 (1,283-2,403),  $p < 0,001$ , and 5,438 (3,268-9,047),  $p < 0,001$ . Conclusion: Poor renal outcome in LN patients in the Indonesian tertiary hospital was  $25\%$  that influenced by the time average of MAP  $> 100$  mmHg, baseline proteinuria  $> 3,5$  g/24 h, and failure to achieve remission.