

PERBANDINGAN PENGGUNAAN MIKOFENOLAT MOFETIL DAN SIKLOFOSFAMID TERHADAP KEJADIAN RELAPS PADA ANAK DENGAN FREQUENTLY RELAPSING NEPHROTIC SYNDROME DAN STEROID-DEPENDENT NEPHROTIC SYNDROME

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INTISARI

Latar belakang: Sekitar 30-40% anak dengan sindrom nefrotik akan berkembang menjadi *frequently relapsing nephrotic syndrome* (FRNS) dan *Steroid-dependent nephrotic syndrome* (SDNS). Pemberian terapi pada anak dengan sindrom nefrotik merupakan tantangan besar karena sangat berisiko untuk menimbulkan komplikasi seperti gagal ginjal kronik. *Steroid sparing agent* seperti siklofosfamid (CPA) dan mikofenolat mofetil (MMF) merupakan salah satu alternatif terapi untuk pasien ini.

Tujuan: Mengetahui perbandingan luaran klinis terapi MMF dan CPA pada pasien anak dengan FRNS dan SDNS.

Metode: Dilakukan studi kohort retrospektif dengan subjek pasien anak usia 1-18 tahun dengan FRNS dan SDNS yang menjalani perawatan di RSUP Dr. Sardjito menggunakan data sekunder rekam medis RSUP Dr. Sardjito dari 1 Maret 2017 sampai dengan 1 Maret 2022. Sampel diambil secara total sampling. Data *survival rate* dianalisis dengan metode kurva Kaplan-Meier. Faktor yang memengaruhi kejadian relaps ditentukan menggunakan analisis regresi Cox. Hubungan antar variabel dinyatakan dengan *hazard ratio* (HR) dan interval kepercayaan 95% dengan tingkat kemaknaan statistik $p < 0,05$.

Hasil: Tiga puluh delapan anak dengan FRNS/SDNS diikutsertakan dengan median usia 83,5 bulan (rentang 43-131 bulan) pada kelompok MMF dan 65 bulan (rentang 20-210 bulan) pada kelompok CPA. Kelompok terapi MMF dan CPA tidak memiliki perbedaan risiko yang bermakna terhadap kejadian relaps (HR=0,404; IK95%: 0,136-1,197; $p=0,102$). Namun, kelompok terapi MMF memiliki waktu remisi pasca relaps yang lebih pendek ($p < 0,05$).

Kesimpulan: Penggunaan terapi MMF dan terapi CPA tidak memiliki perbedaan terhadap rerata frekuensi relaps, Namun, MMF memiliki waktu remisi pasca relaps yang lebih pendek dibandingkan CPA.

Kata kunci: Sindrom nefrotik, mikofenolat mofetil, siklofosfamid, anak

COMPARISON OF MOPHETYL MYCOPHENOLATE AND CYCLOPHOSPHAMIDE ON THE EVENT OF RELAPS IN CHILDREN WITH FREQUENTLY RELAPSING NEPHROTIC SYNDROME AND STEROID-DEPENDENT NEPHROTIC SYNDROME

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ABSTRACT

Background: Approximately 30-40% of children with nephrotic syndrome will develop frequently relapsing nephrotic syndrome (FRNS) and steroid dependent nephrotic syndrome (SDNS). Therapy of nephrotic syndrome in children is a big challenge due to known as various complications such as chronic kidney failure. Steroid sparing agents such as cyclophosphamide (CPA) and mycophenolate mofetil (MMF) are alternative therapies for these patients.

Objective: To determine the comparison of the clinical outcomes of MMF and CPA therapy on the number of relapses in pediatric patients with FRNS and SDNS.

Methods: A retrospective cohort study was conducted with pediatric patients aged 1-18 years with FRNS and SDNS undergoing treatment at RSUP Dr. Sardjito. Secondary data from the medical records of RSUP Dr. Sardjito from March 1, 2017 to March 1, 2022 was used. Samples were taken by total sampling method. Data processing using computerized statistical software. Survival probabilities of the predictive factors were presented in the Kaplan-Meier survival curve. The predictors of event of relapse were determined using cox proportional hazard regression. The relationship between variables were presented as hazard ratio (HR), 95% confidence intervals (95% CI), and statistical significance level $p < 0,05$.

Results: Thirty-eight children with FRNS/SDNS were included with a median age of 83.5 months (range 43-131 months) in the MMF group and 65 months (range 20-210 months) in the CPA group. The MMF and CPA therapy groups did not have a significant difference in risk of relapse ($HR=0,404$; $IK95\%: 0,136-1,197$; $p=0,102$). However, the MMF therapy group had a shorter post-relapse remission time ($p < 0,05$).

Conclusions: The use of MMF therapy and CPA therapy had no difference in the mean relapse frequency. However, MMF had a shorter post-relapse remission time than CPA.

Keywords: Nephrotic syndrome, mycophenolate mofetil, cyclophosphamide, children