

INTISARI

Remdesivir adalah antivirus spektrum luas yang akhir-akhir ini telah digunakan sebagai salah satu pengobatan COVID-19. Namun, hasil penelitian sebelumnya menunjukkan bahwa penggunaan remdesivir memberikan efek kerusakan pada organ hati dan ginjal yang ditandai dengan peningkatan angka *serum glutamic pyruvic transaminase* (SGPT), *serum glutamic oxaloacetic transaminase* (SGOT) dan serum kreatinin (SCr). Penelitian ini bertujuan untuk mengevaluasi keamanan obat remdesivir terkait peningkatan SGOT, SGPT atau SCr pada pasien COVID-19 di RSA UGM, serta mendeskripsikan faktor lain yang dapat memengaruhi efek samping tersebut.

Penelitian ini merupakan penelitian deskriptif kuantitatif yang dilakukan dengan pendekatan *cross-sectional* serta pengambilan data secara retrospektif berdasarkan rekam medis pasien. Data yang digunakan berupa rekam medis lengkap pasien berusia diatas 12 tahun terkonfirmasi COVID-19 yang melakukan rawat inap di RSA UGM, tidak memiliki gangguan hati dan ginjal dan mendapatkan pengobatan remdesivir. Pengambilan sampel dilakukan secara *purposive sampling* dengan analisis deskriptif kuantitatif dan uji statistik *chi-square* pada taraf kepercayaan 95% ($P < 0,05$) untuk melihat hubungan dengan faktor perancu serta dinilai kausalitasnya dengan menggunakan skala Algoritma Naranjo.

Hasil penelitian dari 102 rekam medis menunjukkan sebanyak 2 (1,96%) pasien mengalami efek samping berupa peningkatan SGOT ($\bar{x} = 187 \mu/L$; SD 70,71), 1 (0,98%) pasien mengalami peningkatan SGPT (208 μ/L), dan 7 (6,86%) pasien mengalami peningkatan SCr ($\bar{x} = 1,14 \text{ mg/dL}$; SD 0,95). Tidak terdapat hubungan yang signifikan antara faktor usia, jenis kelamin, komorbid dan penggunaan obat lain terhadap kejadian efek samping pasien. Hasil perhitungan algoritma Naranjo menunjukan bahwa efek samping berupa peningkatan SGOT, SGPT dan SCr kemungkinan terjadi akibat remdesivir (skor 4, *possible*). Hasil yang didapatkan menunjukkan obat remdesivir tergolong aman untuk digunakan sebagai salah satu terapi COVID-19 dengan pengecekan organ hati dan ginjal secara berkala.

Kata Kunci : Remdesivir, Covid-19, Efek Samping, Gangguan Hati & Ginjal

ABSTRACT

Remdesivir is a broad-spectrum antiviral that has recently been used as a treatment for COVID-19. However, the results of previous studies showed that the use of remdesivir had a damaging effect on the liver and kidneys, which was characterized by an increase in the number of serum glutamic pyruvic transaminase (SGPT), serum glutamic oxaloacetic transaminase (SGOT) and creatinine serum (SCr). This study aims to evaluate the safety of remdesivir related to the increase in SGOT, SGPT or SCr in COVID-19 patients at the RSA UGM, as well as to describe other factors that can influence these side effects.

This study is a quantitative descriptive study conduct with a cross-sectional approach and retrospective data collection based on the patient's medical record. The data used is in the form of complete medical records of patients aged over 12 years with confirmed COVID-19 who are hospitalized at the UGM RSA, do not have liver and kidney disorders and are receiving remdesivir treatment. Sampling was carried out by purposive sampling with quantitative descriptive analysis and chi-square statistical test at a 95% confidence level ($P < 0.05$) to see the relationship with confounding factors and assessed causality using the Naranjo Algorithm scale.

The results of the study from 102 medical records showed that 2 (1.96%) patients experienced side effects in the form of an increase in SGOT ($\bar{x} = 187 \mu\text{L}$; SD 70.71), 1 (0.98%) patient experienced an increase in SGPT (208 μL), and 7 (6.86%) patients have an increase in SCr ($\bar{x} = 1.14 \text{ mg/dL}$; SD 0.95). There was no significant relationship between age, gender, comorbid factors and the use of other drugs on the incidence of patient side effects. The results of the calculation of the Naranjo algorithm show that side effects in the form of an increase in SGOT, SGPT and SCr may occur due to remdesivir (score 4, possible). The results obtained show that remdesivir is safe to use as one of the therapies for COVID-19 by checking the liver and kidneys regularly.

Keywords: Remdesivir, Covid-19, Side Effects, Liver and Kidney Disorders