ABSTRACT

In general, patients with chronic kidney disease (CKD) stage 5 are suffering anemia. The main cause of CKD-anemia is erythropoietin deficiency, so erythropoietin stimulating agents (ESA) can be used as therapy. The aims of this study are to determine the relationship between the type of ESA, compliance, early Hb of therapy, and other anti-anemia drugs on Hb target achievements.

This is a cross sectional research and retrospectively from the medical record of patients on hemodialysis in the installation hemodialysis RSUP Dr. Sardjito. The subjects are all CKD-patients with anemia who fulfil inclusion criteria that are aged > 18 years old; receiving ESA from 2014/2015; received ESA for at least 3 months; a medical record data includes identification, comorbid illnesses, anti-anemia drugs, and monitoring of Hb. The data were processed statistically using chi-square test or fisher's exact test to tell whether there is any relationship between the type of ESA, compliance, early Hb of therapy, and other anti-anemia drugs on Hb target achievement or not.

There were 44 patients as samples. The type of ESA being used are epoetin α and β. Most patients received ESA on Hb 8,0 to 8,9 g/dl. Another anti-anemia drugs were iron supplements, folic acid, and vitamin B12. The result showed that the type of ESA ($p = 0,311$), compliance ($p = 1,000$), early Hb of therapy ($p = 0,237$), and other anti-anemia drugs ($p = 0,492$) was not associated with Hb target achievement.

Keywords : Chronic Kidney Disease, Anemia, Erythropoietin Stimulating Agents.

INTISARI

Pasien Penyakit Ginjal Kronik (PGK) stadium akhir pada umumnya mengalami anemia. Penyebab utama PGK anemia adalah defisiensi eritropoietin sehingga pengobatannya dapat dengan *Erythropoietin Stimulating Agent* (ESA). Penelitian ini bertujuan untuk mengetahui hubungan faktor jenis ESA, kepatuhan, Hb awal terapi, dan obat antianemia lain terhadap capaian kadar Hb.

Penelitian ini bersifat *cross sectional research*, pengambilan data dilakukan secara retrospektif dari data rekam medis pasien hemodialisis di Instalasi Hemodialisa RSUP Dr. Sardjito Yogyakarta. Subyek penelitian adalah semua pasien PGK dengan anemia yang memenuhi kriteria inklusi yaitu berusia > 18 tahun; mulai menerima ESA pada tahun 2014/2015; menerima ESA minimal selama 3 bulan; dan terdapat data rekam medis meliputi data pasien, penyakit komorbid, macam obat antianemia, serta pemantauan kadar Hb. Data diolah secara statistik menggunakan uji *Chi-Square* atau uji *Fisher's Exact* untuk melihat ada atau tidak hubungan antara jenis ESA, kepatuhan pasien, Hb awal terapi, dan obat antianemia lain terhadap capaian kadar Hbnya.

Jumlah sampel penelitian yaitu 44 pasien. Jenis ESA yang digunakan epoetin α dan β. Sebagian besar pasien menerima ESA pada Hb 8,0-8,9 g/dl. Obat antianemia lain yang digunakan suplemen besi, asam folat, dan vitamin B12. Hasil penelitian menunjukkan bahwa faktor jenis ESA ($p = 0,311$), kepatuhan ($p = 1,000$), Hb awal terapi ($p = 0,237$), dan obat antianemia lain ($p = 0,492$) tidak berhubungan dengan capaian kadar Hb pasien.

Kata kunci : Penyakit Ginjal Kronis, Anemia, *Erythropoietin Stimulating Agents* (ESA).