

CAPAIAN KADAR HEMOGLOBIN PASIEN PENYAKIT GINJAL KRONIK
DENGAN HEMODIALISIS KRONIK YANG DITERAPI DENGAN EPOETIN ALFA
DAN EPOETIN BETA

(Penelitian Dilakukan di Instalasi Hemodialisis RSUD Dr. Soetomo Surabaya)

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ABSTRACT

Epoetin alfa and beta have been used in the treatment of anemia in chronic kidney disease patient. These agent are different in glycosylation pattern which prevents the hepatic clearance; epoetin beta have greater half life terminal elimination than epoetin alfa. Goal of this observational study is to evaluate hemoglobin level profile (fluctuation and rate) in chronic kidney disease patients treated with epoetin alfa and epoetin beta. Other factors that involve in epoetin therapy are also observed (type, dose, iron status, hemodialysis adequacy and inflammation status). This observational study was conducted from March 1st – June 1st 2011. Data of hemoglobin value were collected every 2 weeks from hemodialysis unit database and analyzed for each period (one period is one month observation). Other laboratory data also had been collected to examine factors involved in epoetin therapy, these are transferin saturation (to assess iron adequacy) and Erythrocyte Sediment Rate (to assess inflammation status). Epoetin dose and hemodialysis frequency data were also collected to assess the dose and hemodialysis adequacy.

Hemoglobin level in 22 subjects (13 subjects with epoetin alfa and 9 subjects with epoetin beta) showed no significant difference ($p=0,092$). Most of the subjects did not reach the hemoglobin target. There were 7.69%; 15.31%; 7.69% and 7.69% patient with epoetin alfa therapy that reached hemoglobin target in 1st, 2nd, 3rd and 4th period respectively. Only 11.11% patient with epoetin beta therapy reached hemoglobin target in the first period and no one reached hemoglobin target for the next period. Fluctuation of hemoglobin level in patient with epoetin alfa and beta showed that most of the patient (62.23% epoetin alfa and 88.89% beta) had low fluctuation but still under hemoglobin target level. The data showed that there were no relationship between hemoglobin level reached and factors that involve in epoetin therapy (epoetin dose, hemodialysis adequacy and iron status), except inflammation status.

Keyword: Chronic Kidney Disease, Hemodialysis, Hemoglobin, Epoetin Alfa, Epoetin Beta.