

COMPARISON OF DOSAGE PATTERN OF ERYTHROPOETIN STIMULATING AGENTS WITH RECOMMENDED DOSE IN HOSPITALIZED PATIENTS.

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Patients with chronic kidney disease have high prevalence of anemia due to low erythropoietin synthesis. Therapy with recombinant erythropoietin reduces cardiovascular morbidity & mortality. The usual recommended doses of darbepoetin (DPO) & epoetin alfa (EPO) are 0.45 mcg/kg/week and 150-300 U/kg/week respectively. Majority of patients receive EPO in outpatient dialysis center which needs to be converted to DPO when they are admitted in our hospital. The recommended conversion from EPO to DPO is 200 units to 1 mcg or specific dosing conversion recommended by DPO manufacturer. Many clinicians experience and some small studies now claim some discrepancy in this conversion relationship. A fixed ratio of 200 to 1 does not necessarily predict appropriate dose conversion between two drugs across the entire spectrum of dose ranges as well as inpatient clinical scenarios. This may be reflecting on the physician's behavior in prescribing DPO in inpatient setting.

Our objective was to observe the dosage pattern of DPO in hospitalized patients & compare with usual recommendation.

We retrospectively reviewed DPO dosage used in our hospital for a period of five months from March 2007 to July 2007. Pharmacy record revealed usage of total 1785 doses of DPO in patients. 40 mcg dose was used in 6%, 60 mcg in 14%, 100 mcg in 48%, 150 mcg in 22% and 200 mcg in 10% of patients. It is to be noted that, usual weight based recommendation for a 70 kg patient is approximately 30 mcg of DPO per week. But our data showed only 6% of patients received the nearest recommended dose.

Inpatient usage of DPO is an ongoing challenge with different clinical situations. A fixed ratio of 200:1 or manufacturer recommended conversion table is not used by most physicians in hospitalized patients. A larger study is needed to establish the dosing pattern of DPO in inpatient setting.