

USE OF ERYTHROCYTE STIMULATING AGENT DURING RENAL TRANSPLANTATION

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Erythropoietin stimulating agents (ESA) are started by some as early as within 24 hours after transplantation to maintain level of hemoglobin at acceptable levels, while others may begin maintenance ESA after transplantation. Recent animal studies have suggested improved renal function with ESA immediately post ischemic and nephrotoxic renal failure.

For this reason, we retrospectively evaluated data of 34 consecutive transplant recipients at the Hahnemann University Medical Center over an 8 month period to evaluate the effect of ESA use early on in some and compared to those not requiring ESA maintenance for anemia correction.

Thirty-four renal transplant patients were divided into 3 groups those who received 100 mcg darbepoietin per week (DBO within 24 hours after transplantation (group 1), n= 8, those who received DBO after 24 hours of transplantation but prior to hospital discharge (group 2), n= 19 and those who required no DBO (group 3), n=7. There was no significant age difference among the groups.

Average admission hemoglobin (Hb) were 12.1, 12.5, and 13.3 gms for groups 1,2,3 respectively. Discharge Hb levels in each group 8.4, 9.1, 10.8 gms for each group 1,2,3 respectively. 60% of patients in groups 1 and 2 required transfusion compared to 28% patients in group 3. Hospitalization days were significantly different between group 1 (mean \pm SE), 8.1 ± 1.1 days and group 2, 15.3 ± 0.85 days, ($p < .000$). No difference in hospitalization days was noted between group 1 and group 3, 10.4 ± 1.2 days.

These preliminary data suggest that there may be a favorable trend in days of hospitalization and earlier improvement of renal function with early use of ESA agent, DBO, in the peritransplant patient. Larger studies are necessary to confirm these findings.