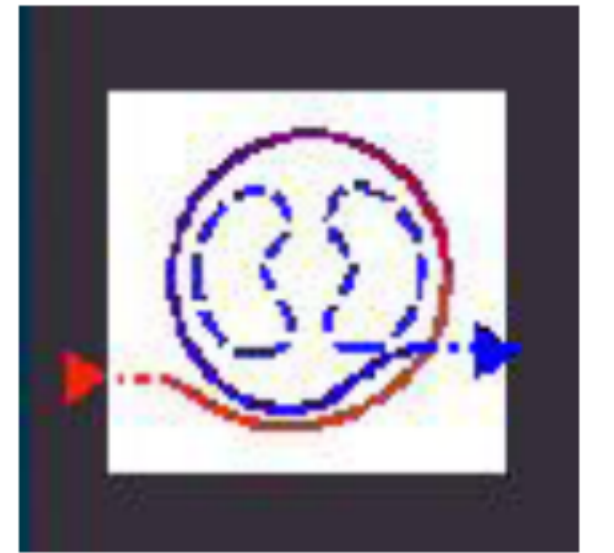


ERYTHROPOIESIS STIMULATING AGENTS IN PD PATIENTS – GENDER DEPENDANT DIFFERENCES



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OBJECTIVES

In the general population, hemoglobin (Hb) concentration is higher in men than in women, the average difference being as high as 2-3 g/dl between genders. However, the target Hb levels in dialysis patients are set constant regardless of the patient's sex.

The aim of this study was to evaluate the differences in Hb concentration between genders in patients undergoing peritoneal dialysis (PD) and to assess the usage of erythropoiesis stimulating agents (ESA) in these subjects taking gender into account.

METHODS

The study was performed on the basis of the national PD registry, on 2205 prevalent PD patients. For comparisons, the weekly dose of ESA in patients not taking erythropoietin-beta was converted into erythropoietin-beta units.

RESULTS

The study included 1050 women and 1155 men. There were no significant differences between genders regarding age and co-morbidities. The percentage of women on ESA was significantly higher than men (68.1 vs 60.7%; $p < 0.001$). Similarly, the average weekly dose of ESA was higher in women than in men (2435 vs 2119U; $p < 0.05$). In fact, gender turned out to be an independent predictor of ESA dosage in this group of patients, following adjustment for age, treatment method, dialysis adequacy, presence of inflammation and co-morbidities. Despite higher ESA dose, the mean Hb was still lower in PD women than in men (11.1 ± 1.6 vs 11.4 ± 1.7 g/dl; $p < 0.02$).

	Women (n = 1050)	Men (n = 1155)	p-value
% on ESA	68.1	60.7	< 0.001
Average ESA dose (U/week)	2435	2119	< 0.05
Hb concentration (g/dl)	11.1 ± 1.6	11.4 ± 1.7	< 0.02

CONCLUSIONS

The prevalence of ESA usage, as well as the average ESA dose is higher in PD women, as compared to men. This can be due, at least in part, to equal target Hb concentrations in both genders.

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