

**EVALUATION OF A STANDARDISED APPROACH TO IV IRON
SUPPLEMENTATION FOR PATIENTS WITH CHRONIC RENAL DISEASE
WHO ARE NOT HAEMODIALYSED**

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PROBLEM: Guidelines for the management of anaemia in pre-dialysis patients has dramatically swollen the number of non-haemodialysis patients requiring iron supplementation (in addition to those on CAPD). To accommodate this volume of patients and associated workload IV iron administration is standardised. Many patients now receive 1000mg of low molecular weight iron dextran complex (CosmoFer) given as a total dose infusion (TDI) when determined by haemoglobin and ferritin monitoring.

PURPOSE: To evaluate the clinical impact of a standardised IV iron regimen for patients with chronic renal disease who are not haemodialysed.

DESIGN: Audit data, 113 administrations between January 2002 and September 2003 have been analysed to determine the mean increase in ferritin and haemoglobin levels to evaluate the clinical impact of this standardised approach. Ferritin and haemoglobin levels were recorded pre-TDI and six weeks post TDI. Only records where both the pre- and post- levels of both parameters are available are included and where there was no increase in EPO dose (1 patient). Some patients received more than one infusion in the 21 month period. Patients' comments were sought post TDI.

FINDINGS: Records for TDI (n=87) administrations.

	Mean haemoglobin pre- TDI	Mean haemoglobin post- TDI	Difference	Mean ferritin pre- TDI	Mean ferritin post- TDI	Difference
EPO (n=51)	10.20 g/dl	12.18 g/dl	1.98 g/dl	62µg/l	304µg/l	242µg/l
No EPO (n=36)	9.61 g/dl	10.60 g/dl	0.99 g/dl	53µg/l	256µg/l	203µg/l
Total	9.96 g/dl	11.53g/dl	1.57g/dl	58µg/l	284 µg/l	226µg/l

Post administration there were sizeable increases in both mean Hb and ferritin levels. The mean Hb levels in patients receiving EPO exceed 12g/dl and those not receiving EPO exceed 10g/dl. To achieve and maintain adequate Hb levels ferritin stores should be in the range 200-500 µg/l. This has been attained in both groups. The predominant patient comments relate to having to visit the hospital only once for treatment (30%) and a single needle insertion (28%).

CONCLUSION: A standardised approach to intravenous iron supplementation, giving 1000mg iron, in the form of low molecular weight iron dextran complex, to all patients by TDI, achieves clinical expectations, is appreciated by patients and has enabled the unit to effectively manage a growing workload.

RELEVANCE: The provision of comprehensive anaemia management for patients with chronic renal disease pre-dialysis has dramatically increased the number of patients requiring IV iron supplementation affecting waiting times and waiting lists for anaemia care. An effective and economic solution is needed.