PROFILES OF SERUM FERRITIN AND TRANSFERRIN SATURATION FOLLOWING ADMINISTRATION OF TWO IV IRON FORMULATIONS TO HEMODIALYSIS PATIENTS

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Patients undergoing hemodialysis therapy lose approximately 2 to 3 grams of iron annually. IV iron administration is indicated for proper iron replacement and essential for effective erythropoiesis. The two widely IV iron formulations use in dialysis in the United States are iron sucrose and sodium ferric gluconate. This abstract presents an assessment of serum ferritin and transferrin saturation (TSAT) levels on these two iron formulations.

Holy Name Hospital (HNH)'s dialysis center has over 200 adult hemodialysis patients dialyzed weekly. Retrospective data analysis comparing serum ferritin (target 200-600 ng/mL) and transferrin saturation (TSAT) (target 20% or >) levels for the same group of patients that had similar protocols and monitoring parameters. Group A received iron sucrose the first 6 months of the study (quarters 1 and 2), from November, 2005 to April, 2006 and Group B received sodium ferric gluconate the second 6 months (quarters 3 and 4), from May to November 2006. The method was approved by HNH.

Levels were reported according to quarters 1, 2, 3 and 4. The following are the percentages of patients who had serum ferritin: (>600 ng/mL) 30%, 30%, 17% and 23%; (200 – 600 ng/mL) 57%, 56%, 59%, and 60%; (<200 ng/mL) 13%, 14%, 24%, and 17% respectively. The following are the percentages of patients who achieved TSAT: (20% or >) 60%, 77%, 80%, and 79% respectively.

Iron sucrose group had more patients with serum ferritin levels >600 ng/mL, whereas, sodium ferric gluconate group had more patients achieved target serum ferritin and TSAT levels.