



Ferric carboxymaltose versus Iron sucrose complex in women with benign gynaecological disorders and iron deficiency

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Objective

To compare safety and efficacy of Ferric Carboxymaltose with Iron Sucrose complex regarding improvement in hematological parameters and side effects in women with benign gynaecological disorders having iron deficiency anemia.

Methods

Prospective randomized controlled study conducted in department of Obstetrics & Gynecology, in a tertiary care hospital in Delhi. 60 women having Iron deficiency Anemia with Hb 6-8 g% were randomized 1:1 into two groups and were given 1000mg parenteral iron. One group received intravenous 500mg Ferric Carboxymaltose on day 0 and 8. 200mg Iron Sucrose complex was given in second group on alternate days for 5 doses. Haematological parameters - Hb, Reticulocyte count, RBC indices, S. ferritin; clinical parameters - fatigue, dyspnea on exertion and adverse effects were studied on day 0, 7, 14 & 28.

Results

Two Ferric Carboxymaltose infusions vs five Iron Sucrose Complex infusions were required. On day 28, Hb increment $\geq 3g\%$ seen in 63.33% and MCV $>80FL$ seen in 100% of Ferric Carboxymaltose group vs. 0% and 43.33% in Iron Sucrose Complex group. Ferric Carboxymaltose group had 3.17 g/dl increment in Hb vs. 1.9 g/dl in Iron Sucrose Complex group. S. Ferritin increased to 147ng/ml in Ferric Carboxymaltose group vs. 98 ng/ml in Iron Sucrose Complex group. Significant improvement in RBC indices & rectic count was seen in Ferric carboxymaltose group. Earlier and significant improvement in fatiguability & dyspnea on exertion was observed in Ferric Carboxymaltose group. Both groups had similar safety profile except for thrombophlebitis was observed in 6.67% Ferric Carboxymaltose group vs. 50.00% Iron Sucrose Complex group.

Conclusion

Intravenous Ferric Carboxymaltose is more effective and safer than Iron Sucrose complex in the treatment of iron deficiency anemia in women with benign gynecological disorders.