Summary and Conclusions

Iron deficiency anaemia is a major public health problem among women of reproductive age in most of developing countries approximately 50% of pregnant women and 35% of non pregnant women are anaemic.

This nutritional disorders, has profound negative effects on pregnancy out come , health of mothers and babies.

The aim of this study is to determine whether iron chelated amino acid thereby for iron deficiency anaemia has more beneficial effect than traditional oral iron therapy.

The study was done through giving anaemic pregnant women iron therapy in form of iron chelated amino acid with commercial name ferrotron and it represent G1 and ferrous gluconate and sulphate which represent group II and III.

For each women the following were done.

1- Gestational history, age and parity before treatment.

2- Laboratory investigations that include haemoglobin level, MCHC and reticulocytic count before and after treatment.

3- Side effects were reported with each drug during the treatment.

4- daily cost of the therapy was done to compare between the three groups.

The results of this study reveal the following:

There was significant difference between group I and GII & GIII as regard to Hb level, MCHC.

The reticulocytic count reached the upper level during the first week in group I while GII&III the upper level reached during the second week of taking the treatment.

Also there was highly significant difference between group I and GII & GIII as regard side effects with significant decrease in side effects in GI than GII & III.

But no significant difference between all groups as regard to Apgar scores of the newborns.

It was observed through the study that (88.2%) of the patients took the iron therapy regularly while (11.8%) of the patients took the iron therapy irregularly.

The main cause of stoppage of iron intake with ferrous sulfate and gluconate were the side effects of theraby which mainly related to GIT disturbance, and irregular attendance for antenatal care and follow up.

But from our study on iron chelated amino acid with its decreased side effect, all women took it regularly and give good result for treatment of iron deficiency anaemia.

In conclusions

The present study showed that iron chelated amino acid (ferrotron) increased Hb level and MCHC & RC through increasing iron absorption and obviate the problems of GIT during four weeks of therapy.

But with ferrous sulphate and gluconate, absorption of iron was incomplete as iron chelated amino acid thus increased side effects with it and anaemia not treated completely during the four weeks.

Thus iron chelated amino acid therapy has more beneficial effect for pregnant women for treatment of iron deficiency anaemia.