



A STUDY TO ASSESS THE EFFECTIVENESS OF TREATING IRON DEFICIENCY ANAEMIA WITH IRON SUPPLEMENTS IN ANTENATAL MOTHERS IN SELECTED HOSPITAL

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Abstract :

Anemia is the direct cause of maternal death in 10-15% of cases but is an associated cause in many maternal deaths due to haemorrhage, sepsis and cardiac failure.(2) Anemia in pregnancy is associated with an adverse obstetric outcome in form of spontaneous abortions, preterm labor, low birth weight babies and intrauterine growth retardation. The objectives of the study was to find the effectiveness of treating iron deficiency anaemia with iron supplements .The study was conducted in sree balaji hospital ,the study design was Prospective Study, 60 antenatal mothers in second trimester with hemoglobin > 6 grams % and < 11 grams % were selected through purposive sampling technique. Iron sucrose has been found to be effective in improving hemoglobin, hematocrit, serum iron & ferritin values significantly in antenatal women with iron deficiency anemia. By using intravenous iron sucrose to treat iron deficiency anemia in antenatal patients, the rate of blood transfusions could be reduced.

Key words : Anemia ,Antenatal, blood transfusion ,iron supplements .

Introduction

During pregnancy, your body produces more blood to support the growth of your baby. If you're not getting enough iron or certain other nutrients, your body might not be able to produce the amount of red blood cells it needs to make this additional blood

Anemia is the direct cause of maternal death in 10-15% of cases but is an associated cause in many maternal deaths due to haemorrhage, sepsis and cardiac failure.(2) Anemia in pregnancy is associated with an adverse obstetric outcome in form of spontaneous abortions, preterm labor, low birth weight babies and intrauterine growth retardation. The World Health Organisation (WHO) defines anemia in pregnant women as hemoglobin level below 11 g / dl. Iron deficiency is the most common hematinic deficiency in pregnancy, followed by folate deficiency. Prevention or early treatment of pregnancy anemia is the best prophylaxis against maternal mortality. Folate deficiency can directly contribute to certain types of birth defects, such as neural tube abnormalities (spina bifida) and low birth weight.

OBJECTIVES OF THE STUDY

- 1.To assess the effectiveness of in treating iron deficiency anemia with iron supplements in antenatal mothers
2. To assess the association of demographic variables with effectiveness in treatment of iron deficiency anemia in antenatal patients

Methodology

The study was conducted in sree balaji hospital ,the study design was Prospective Study, 60 antenatal mothers in second trimester with hemoglobin > 6 grams % and < 11 grams % were selected through purposive sampling technique . 200mg iron sucrose was diluted with 100 ml of normal saline immediately prior to infusion and is to be infused over a period of atleast 30 minutes to 1 hour. The same dose repeated after 2 days. Hemoglobin, packed cell volume were analysed by automatic cell counter. Serum iron, total iron binding capacity was calculated using semi auto analyser.

Major findings of the study :

In this study, 60 antenatal patients with iron deficiency anemia were selected according to the inclusion and exclusion criteria stated. 200 mg iron sucrose was given intravenously 2 doses 2 days apart and was followed up after 1 month interval & again at delivery

1. Majority of patients around 46%, were in age group 21 – 25 yrs.
2. 80% of patients were in class V socio economic status.
3. 76% patients were booked
4. Majority of patients were multiparous
5. Average rise in hemoglobin after treatment was 5.76 g/dl with p value < 0.05, statistically significant.
6. Average rise in serum ferritin after treatment was 145.89 µg/l with p value < 0.05, statistically significant.
7. Average rise in packed cell volume after treatment was 8.83 with p value < 0.05, statistically significant
8. Average rise in serum iron after treatment was 34.72 µg/ l with p value < 0.05, statistically significant.
9. Average rise in total iron binding capacity after treatment was 109.5 with p value < 0.05, statistically significant

Conclusion

Iron sucrose has been found to be effective in improving hemoglobin, hematocrit, serum iron & ferritin values significantly in antenatal women with iron deficiency anemia. By using intravenous iron sucrose to treat iron deficiency anemia in antenatal patients, the rate of blood transfusions could be reduced. To conclude intravenous iron sucrose is safe, convenient and more effective therapy for treatment of iron deficiency anemia in antenatal patients requiring shorter period to

achieve maximum hemoglobin concentration. It has convenient dosage and administration. It can be used to replace blood transfusion in antenatal period.

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