

FOGSI General Clinical Practice Recommendations

Management of Iron Deficiency Anemia in Pregnancy

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1. Recommendations- Diagnosis

- 1.1. Universal screening for iron deficiency anemia with hemoglobin is recommended for all pregnant women at the first antenatal visit. (Grade A, level 4)
- 1.2. With a presumptive diagnosis of iron deficiency anemia, a trial of oral iron (100 mg/twice a day) for two weeks is recommended in patients with mild to moderate anemia. Further investigations are warranted if patients do not respond to the trial of oral iron (rise in hemoglobin at two weeks). (Grade A, level 2)
- 1.3. An empirical trial of oral iron for two weeks is advised up to 30-32 weeks of gestation in patients with mild to moderate anemia before considering further tests. (Grade A, level 4)
- 1.4. These investigations are complete blood count with peripheral smear, red blood cell indices (mean corpuscular volume, mean corpuscular hemoglobin, and mean corpuscular hemoglobin concentration), reticulocyte count, Blood films for malaria parasites (particularly in high malaria risk areas) and Stool examination for ova, cyst and occult blood (Grade A; Level 4)
- 1.5. In the case of the microcytic and hypochromic type of anemia (low mean corpuscular volume), serum ferritin and C-reactive protein is advisable to differentiate iron deficiency anemia from thalassemia trait and anemia of chronic disease. Hemoglobin electrophoresis to rule out thalassemia trait is preferred if the facilities are available. (Grade A; Level 2)
- 1.6. The diagnosis of iron deficiency may further be confirmed by tests like total iron binding capacity, serum iron, transferrin saturation, soluble transferrin receptors, zinc proto porphyrin, and erythrocyte protoporphyrin in settings with adequate resources. These measurements may be helpful adjuncts to differentiate iron deficiency anemia from anemia of chronic disease. (Grade B; Level 3)

2. Recommendations- Management of IDA in pregnancy and postpartum

- 2.1. Awareness and health education strategies should continue with a greater momentum to encourage antenatal mothers to consume iron-rich foods and diets that enhance iron absorption. Refer Appendix I for food rich in iron. (Grade A, level 2)
- 2.2. Daily iron supplementation (60-100) mg of iron and 500 µg of folic acid) for all non-anemic pregnant women at first antenatal visit is recommended for primary prevention of anemia with repeat hemoglobin at least once in each trimester. (Grade A, level 3)
- 2.3. In pregnant women with established mild to moderate anemia, with a period of gestation less than 30-32 weeks, and those who respond to a trial of oral iron, the treatment should continue with 100 mg elemental iron twice daily and 500 µg of folic acid with an assessment for the rise in hemoglobin. Repeat hemoglobin is recommended after 4 weeks of oral iron. (Grade A, level 3)
- 2.4. After achieving the normalization of hemoglobin a prophylactic daily iron supplementation (60-100 mg and 500 µg of folic acid) is recommended for at least 6 months during pregnancy and should be continued in postpartum for another 6 months. (Grade A, level 3)
- 2.5. Pregnant women on oral iron supplements should be counseled about steps to reduce gastrointestinal side effects. These include consuming the tablet at least about one hour before a meal, along with absorption enhancers (like Vit C). (Grade A, level 3)
- 2.6. Parenteral iron is recommended for pregnant women with anemia who do not respond or are intolerant to oral iron. Among the newer intravenous formulations, iron sucrose is approved for use during pregnancy though it is better avoided during the first trimester. (Grade A, level 3)

- 2.7. Parenteral iron is also recommended for pregnant women with severe anemia who require rapid restoration of iron stores in the second and early 3rd trimester of pregnancy. (Grade A, level 3)
- 2.8. Packed red cell transfusion should be reserved for those with, severe anemia at any period of gestation. (Grade B, level 3)
- 2.9. Deworming using Albendazole is routinely recommended after the first trimester to avoid the soil-transmitted helminthic infestation. (Grade A, level 2)