

**FOGSI General Clinical Practice Recommendations
Management of Iron Deficiency Anemia in adolescent girls**

Chairperson

[Dr. Alka Kriplani](#)

MD, FRCOG, FAMS, FICOG, FIMSA, FICMCH, FCLS

Professor & Head, Dept of Obst-Gynae

Director In-charge WHO-CCR, HRRC & Family Planning

All India Institute of Medical Sciences, New Delhi, India

Coordinators

[Dr. Aparna Sharma](#)

MD, DNB

Assistant Professor, Obstetrics and
Gynaecology

All India Institute of Medical Sciences

New Delhi

[Dr. A G Radhika](#)

DGO, DNB, MNAMS

Senior Specialist

University College of Medical Sciences &

Guru Teg Bahadur Hospital, Delhi

Experts

[Dr Zoya Ali Rizvi](#)

MBBS (Gold Medalist), MPH (London UK).

Fellowship from WHO

Assistant Commissioner - Adolescent Health

NHRM, MOHFW, Govt of India, New Delhi

[Dr K. Madhavan Nair](#)

PhD, FAMS, FNAAS, FTAS

MSc (Biochemistry)

Scientist 'F' & Head, Micronutrient Research

Group, National Institute of Nutrition, Indian

Council of Medical Research , Hyderabad

[Dr. Aparna Sharma](#)

MD, DNB

Assistant Professor, Obstetrics and
Gynaecology, All India Institute of Medical

Sciences, New Delhi

[Dr. A G Radhika](#)

DGO, DNB, MNAMS

Senior Specialist

University College of Medical Sciences &

Guru Teg Bahadur Hospital, Delhi

[Dr Parikshit Tank](#)

MD, DNBE, FCPS, DGO, DFPMICOG,
MRCOG

[Dr Pankaj Malhotra](#)

MD, FRCP (London), FRCP (Glas), FACP,
FICP, MNAMS, FISHTM

Chairperson, Safe Motherhood Committee,
FOGSI
IVF & Infertility Specialist, Ashwini
Maternity & Surgical Hospital, Mumbai

[Dr Bharati Dhorepatil](#)

DNB (Ob & Gyn), DGO, FICS, FICOG
Dip. Endoscopy (Germany)
Post Gr. Dip. in Clinical Research (UK)
Director & Chief IVF Consultant, Pune
Infertility Center, Pune, Maharashtra

[Dr S Shantha Kumari](#)

MD. DNB FICOG
Consultant -Care Hospitals, Hyderabad

Professor of Clinical Hematology
Department of Internal Medicine
Post Graduate Institute of Medical Education &
Research, Chandigarh

[Dr Sadhana Gupta](#)

MBBS (Gold Medalist), MS (Gold Medalist)
MNAMS, FICOG, FICMU,
Director & consultant Jeevan Jyoti Hospital,
Medical Research & Test Tube Baby Centre,
Gorakhpur

[Dr Kamala Selvaraj](#)

MD, DGO, PhD
Associate Director of GG Hospital, Chennai

1. Recommendations for diagnosis of IDA in adolescent girls (10-19 y)

- 1.1. All adolescent girls should be screened for iron deficiency anemia, with hemoglobin as primary screening test. (Grade A; Level 3)
- 1.2. A trial of oral iron (60mg/day) for 2 weeks along with deworming (albendazole 400 mg) is recommended in adolescent girls with mild to moderate anemia (hemoglobin range 8-12 g/dL) before considering further tests. (Grade A; Level 2)
- 1.3. Further investigations are warranted if patients do not respond to the trial of oral iron (rise in hemoglobin of at least 1 gm/dL over two weeks). The initial investigations are complete blood count with peripheral smear, red blood cell indices (mean corpuscular volume, mean corpuscular hemoglobin, and mean corpuscular hemoglobin concentration), and reticulocyte count. (Grade A; Level 4)
- 1.4. In case of the microcytic and hypochromic type of anemia (low mean corpuscular volume), serum Ferritin and C-reactive protein should be done to differentiate iron deficiency anemia from thalassemia trait and anemia of chronic disease. Hemoglobin electrophoresis should be performed if the facility is available to rule out. (Grade A; Level 2)
- 1.5. 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 IDA from anemia of chronic disease. (Grade B; Level 3)

2. Recommendations for prevention and treatment of IDA amongst adolescent girls

- 2.1 Education regarding iron and vitamin C rich diet with due encouragement for their simultaneous consumption should be given to adolescent girls to prevent iron deficiency. Refer to Table 7 for foods high in iron. (Grade A; Level 1)
- 2.2 Weekly supplementation of 100 mg elemental iron along with 500µg folic acid for 52 weeks in a year and deworming (albendazole 400mg) every 6 months is recommended to prevent IDA (Grade A; Level 3)
- 2.3 Lower dose formulations for prevention : 20 mg-30mg elemental iron daily with 500µg folic acid along with deworming is suggested as an alternative for prevention of , to ensure better compliance (Grade B; Level 4)
- 2.4 In adolescent girls who have mild to moderate anemia and respond to oral iron, it is recommended to continue the treatment for at least 3 months after the normalization of hemoglobin. (Grade A; Level 3)
- 2.5 It is recommended to assess Hb approximately 6 months after successful treatment of IDA. Patients should be counseled regarding dietary modifications and prophylactic iron therapy to prevent recurrence. (Grade B; Level 4)
- 2.6 In patients who are intolerant to oral iron or are non-compliant, intravenous iron is recommended after ruling out hemoglobinopathy. (Grade A; Level 3)
- 2.7 In severely anemic adolescents girls (hemoglobin \leq 4 g/dL), blood transfusion is recommended. (Grade A; Level 4)
- 2.8 Excessive menstrual blood loss which is common in adolescent age group, should be identified and effectively managed. (Grade A; Level 4)