貧血的診斷及處理流程-Microcytic Anemia

Patient with MICROCYTIC ANEMIA

History → CBC, indices

Physical examination → Assess degree of anemia

Mild (Hemoglobin > 10 g/dl)

Trial of Oral Iron

Dietary counseling
Repeat hematocrit in 1 month

Improved

Not improved

Moderate (Hemoglobin 8–10 g/dl)

History and physical compatible with iron deficiency

Severe (Hemoglobin < 8 g/dl)

Serum ferritin/iron/
total iron-binding capacity
Hemoglobin electrophoresis
Family studies
Hematology consultation
Consider:
Hospitalization
Transfusion

Yes

Iron deficiency (severe)

Homozygous beta-thalassemia

Sickle cell beta-thalassemia

Hemoglobin E-beta-thalassemia

Hemoglobin H disease (severe alpha-thalassemia)

No

Reticulocyte count
Dietary counseling

Trial of Oral Iron
Repeat reticulocyte count in 1 week

No response

Response

Examine smear
Consider:
Erythrocyte protoporphyrin
Ferritin/serum iron/
total iron-binding capacity
Family studies
Hemoglobin electrophoresis
(quantitative)

Iron deficiency

Beta-thalassemia
Alpha-thalassemia
Sickle beta-thalassemia
Lead poisoning
Chronic disease
Homozygous hemoglobin E
Hereditary pyropoikilocytosis

Continue Oral Iron 3–6 months

Dietary counseling (age <36 months)
Investigate blood loss (age >36 months)