

Serum Iron Studies (82728, 83540, 83550, 84466) 190.18

Indications:

1. Ferritin, iron and either iron binding capacity or transferrin are useful in the differential diagnosis of iron deficiency, anemia, and for iron overload conditions.

a. The following presentations are examples that may support the use of these studies for evaluating iron deficiency:

Certain abnormal blood count values (i.e., decreased Mean Corpuscular Volume (MCV), decreased hemoglobin/hematocrit when the MCV is low or normal, or increased Red cell Distribution Width (RDW) and low or normal MCV)

Abnormal appetite (pica)

Acute or chronic gastrointestinal blood loss

Hematuria

Menorrhagia

Malabsorption

Status post-gastrectomy

Status post-gastrojejunostomy

Malnutrition

Preoperative autologous blood collection(s)

Malignant, chronic inflammatory and infectious conditions associated with anemia which may present in a similar manner to iron deficiency anemia

Following a significant surgical procedure where blood loss had occurred and had not been repaired with adequate iron replacement.

b. The following presentations are examples that may support the use of these studies for evaluating iron overload:

Chronic Hepatitis

Diabetes

Hyperpigmentation of skin

Arthropathy

Cirrhosis

Hypogonadism

Hypopituitarism

Impaired porphyrin metabolism

Heart failure

Multiple transfusions

Sideroblastic anemia

Thalassemia major

Cardiomyopathy, cardiac dysrhythmias and conduction disturbances

2. Follow-up testing may be appropriate to monitor response to therapy, e.g., oral or parenteral iron, ascorbic acid, and erythropoietin.

3. Iron studies may be appropriate in patients after treatment for other nutritional deficiency anemias, such as folate and vitamin B12, because iron deficiency may not be revealed until such a nutritional deficiency is treated.

4. Serum ferritin may be appropriate for monitoring iron status in patients with chronic renal disease with or without dialysis.

5. Serum iron may also be indicated for evaluation of toxic effects of iron and other metals (e.g., nickel, cadmium, aluminum, and lead) whether due to accidental, intentional exposure or metabolic causes.

Limitations:
1. Iron studies should be used to diagnose and manage iron deficiency or iron overload states. These tests are not to be used solely to assess acute phase reactants where disease management will be unchanged. For example, infections and malignancies are associated with elevations in acute phase reactants such as ferritin, and decreases in serum iron concentration, but iron studies would only be medically necessary if results of iron studies might alter the management of the primary diagnosis or might warrant direct treatment of an iron disorder or condition.
2. If a normal serum ferritin level is documented, repeat testing would not ordinarily be medically necessary unless there is a change in the patient's condition, and ferritin assessment is needed for the ongoing management of the patient. For example, a patient presents with new onset insulin-dependent diabetes mellitus and has a serum ferritin level performed for the suspicion of hemochromatosis. If the ferritin level is normal, the repeat ferritin for diabetes mellitus would not be medically necessary.
3. When an End Stage Renal Disease (ESRD) patient is tested for ferritin, testing more frequently than every three months requires documentation of medical necessity (e.g., other than chronic renal failure or renal failure, unspecified).
4. It is ordinarily not necessary to measure both transferrin and TIBC at the same time because TIBC is an indirect measure of transferrin. When transferrin is ordered as part of the nutritional assessment for evaluating malnutrition, it is not necessary to order other iron studies unless iron deficiency or iron overload is suspected as well.
5. It is not ordinarily necessary to measure either iron/TIBC (or transferrin) and ferritin in initial patient testing. If clinically indicated after evaluation of the initial iron studies, it may be appropriate to perform additional iron studies either on the initial specimen or on a subsequently obtained specimen. After a diagnosis of iron deficiency or iron overload is established, either iron/TIBC (or transferrin) or ferritin may be medically necessary for monitoring, but not both.
6. It would not ordinarily be considered medically necessary to do a ferritin as a preoperative test except in the presence of anemia or recent autologous blood collections prior to the surgery.

Most Common Diagnoses (which meet medical necessity) *	
C18.9	Malignant Neoplasm of Colon
C20	Malignant Neoplasm of Rectum
C34.90	Malignant Neoplasm of Bronchus or Lung
C67.9	Malignant Neoplasm of Bladder
C79.51	Secondary Malignant Neoplasm of Bone
C90.00	Multiple Myeloma Not Having Achieved Remission
C91.10	Chronic Lymphocytic Leukemia of B-Cell Type Not Having Achieved Remission
D45	Polycythemia Vera
D46.9	Myelodysplastic Syndrome
D47.3	Essential (Hemorrhagic) Thrombocytopenia
D50.0	Iron Deficiency Anemia secondary to Blood Loss (Chronic)
D50.9	Iron Deficiency Anemia
D51.9	Vitamin B12 Deficiency Anemia

D52.9	Folate Deficiency Anemia
D53.9	Nutritional Anemia
D62	Acute Posthemorrhagic anemia
D63.0	Anemia in Neoplastic Disease
D63.1	Anemia in Chronic Kidney Disease
D64.81	Anemia Due to Antineoplastic Chemotherapy
D64.9	Anemia
D69.6	Thrombocytopenia
E11.22	Type 2 Diabetes Mellitus with Diabetic Chronic Kidney Disease
E11.9	Type 2 Diabetes Mellitus Without Complication
E46	Protein-Calorie Malnutrition
E61.1	Iron Deficiency
E83.119	Hemochromatosis
E83.19	Other Disorders of Iron Metabolism
I50.9	Heart Failure
K50.90	Crohn's Disease
K51.90	Ulcerative Colitis
K74.60	Cirrhosis of Liver
K76.0	Nonalcoholic Fatty Liver Disease
K90.9	Intestinal Malabsorption
K91.2	Postsurgical Malabsorption
K92.1	Melena
K92.2	Gastrointestinal Hemorrhage
M25.50	Pain in Joint
N18.9	Chronic Kidney Disease
R71.8	Other Abnormality of Red Blood Cells
R74.01	Elevation of Levels of Liver Transaminase Levels
R74.9	Abnormal Serum Enzyme Level
R79.9	Abnormal Finding of Blood Chemistry
Z86.2	Personal History of Diseases of the Blood and Blood-Forming Organs

*For the full list of diagnoses that meet medical necessity see the Serum Iron Studies National Coverage Determination 190.18 document.

The above CMS and WPS-GHA guidelines are current as of: 4/01/2024.