

PHARMACOTHERAPY OF IRON DEFICIENCY ANEMIA

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Introduction. Iron deficiency is the most common form of malnutrition in the world, affecting more than 2 billion people globally. Iron deficiency anemia is highly prevalent in less-developed countries but also remains a problem in developed countries where other forms of malnutrition have already been virtually eliminated. Iron deficiency is not the only cause of anemia, but where anemia is prevalent, iron deficiency is usually the most common cause(WHO 1998).

Aim. The aim of the report is to inform people about the main symptoms and causes of iron deficiency anemia and actual pharmacotherapy.

Materials and methods. Anemia is associated with chronic fatigue, impaired cognitive function, and diminished well-being. Patients with iron deficiency anemia of unknown etiology are frequently referred to a gastroenterologist because in the majority of cases the condition has a gastrointestinal origin. The dosage of elemental iron required to treat iron deficiency anemia in adults is 120 mg per day for three months. An increase in hemoglobin of 1 g per dL after one month of treatment shows an adequate response to treatment and confirms the diagnosis. In adults, therapy should be continued for three months after the anemia is corrected. Treatment of an underlying cause should prevent further iron loss, but all patients should have iron supplementation. This is achieved most simply with ferrous sulphate 200 mg twice daily. Other iron compounds (eg, ferrous fumarate, ferrous gluconate) or formulations may also be tolerated better than ferrous sulphate.

Parenteral iron agents: iron sucrose (Venofer), ferric carboxymaltose (Ferinject), sodium ferric gluconate (Ferrelecit) and Ferumoxytol. Once normal, the Hb concentration and red cell indices should be monitored 3 monthly for 1 year, then after a further year, and again if symptoms of anemia develop after that. Further oral iron should be given if the Hb or red cell indices fall below normal.

Results and discussion. Adherence to oral iron therapy can be a barrier to treatment because of GI adverse effects such as epigastric discomfort, nausea, diarrhea, and constipation. These effects may be reduced when iron is taken with meals, but absorption may decrease by 40 percent. Medications such as proton pump inhibitors and factors that induce gastric acid hyposecretion (e.g., chronic atrophic gastritis, recent gastrectomy or vagotomy) are associated with reduced absorption of dietary iron and iron tablets.

Conclusions. To reduce a risk of an iron deficiency anemia by choosing iron-rich foods: Red meat, pork and poultry, seafood, beans, dark green leafy vegetables (spinach). Dried fruit, such as raisins and apricots. Iron-fortified cereals, breads and pastas, peas.