

International Journal of Pharmaceutical Research and Applications

Volume 9, Issue 4 July-Aug 2024, pp: 502-504 www.ijprajournal.com ISSN: 2456-4494

Iron Deficiency Anemia

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Date of Submission: 15-07-2024 Date of Acceptance: 26-07-2024

ABSTRACT:

Anemia is a condition in which the body does not have enough healthy red blood cells. Anemia is a world- wide disease. The iron deficiency anemia is the most common nutritional deficiency in the world which has recognized by WHO. Anemia is encountered in daily practice. It is most common medical problem. We identify the risk factors most frequent in low and middle income countries including nutritional deficiencies, inflammation and genetic disorders. In this review it is motive to know about anemia including types, causes, symptoms, treatment and to notify or aware to the public about the anemia.

KEYWORDS: anemia, anemia of inflammation, iron deficiency, iron deficiency anemia, nutritional anemias.

I. INTRODUCTION:

Iron deficiency anemia is widespread in children and women, adult men are also sensitive depending on their materialistic status and health conditions. In women, the symptoms are gastrointestinal bleeding and menstruation that have common causes of iron deficiency anemia, which reduce dietary iron intake or absorption. Hemoglobin is the most sufficient ferrous related protein in humanoid. It is based on the area or part of the hemoglobin in erythrocytes, anemia attributes iron deficiency.

Erythrocytes and their messenger are essential for the large quantity of iron for the production of heme and hemoglobin. Person shows pale colour in anemia. Anemia is categorized depending on their size of RBC. Smaller cells: Microcytic anemia Larger cells: Macrocytic anemia Normal cells: Normocytic anemia

Based on examination from WHO in 2008, anemia influences 24.8% population all over the world, it involves 42% pregnant women, 30% non-pregnant women and 47% pre-school children. There are three main effects of anemia which contains iron deficiency anemia, hemoglobinopathy and malaria. Determining suitable Hb doorstep to define anemia is necessary for securing that anemia is correctly recognize.

PATHOPHYSIOLOGY:

Iron is necessary element and is inhibited fundamentally by dietary intake, intestinal absorption and iron recycling. It can be found in two form heme and non-heme iron. Heme iron is easily digestible and originates from Hb and myoglobin in the form of animal, meat, poultry and fish.

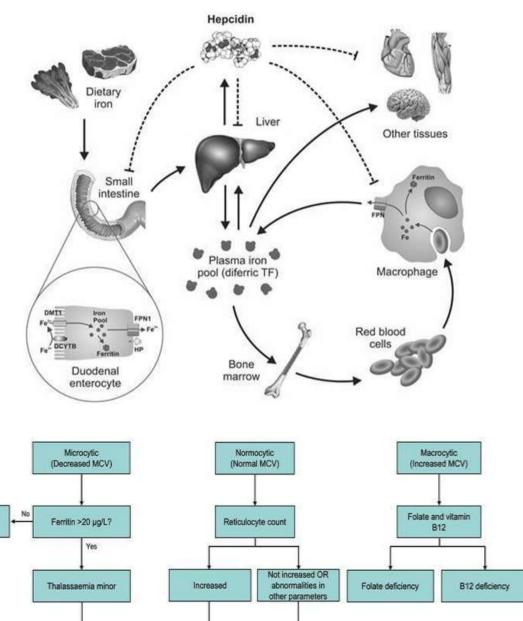
Non- heme iron is detected in plant food but not easily digestible. Ascorbic acid, citrate and gastric acid vice- versa which promotes the iron absorption. For a nutritious diet around 5-15 mg elemental iron and 1-5 mg of heme iron are consumed daily although only 1-2 mg is absorbed into the intestine, generally in the duodenum and adjacent jejunum.



TYPES:

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Haemolysis or blood

loss

hypoplasia,

HPLC, High-performance liquid

chromatography

Elevated HbA2 >3.5%

(May also have elevated

Beta thalassaemia minor

HPLC/Hb electrophoresis

Normal

Alpha thalassaemia gene

testing to diagnose

alpha thalassaemia minor



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CAUSES:

- 1. Inadequate diet
- 2. Vitamin B12 deficiency
- 3. Abnormalities of GIT
- 4. Pregnancy, menopause
- 5. Gastrointestinal tract infection
- 6. Folic acids and iron rich foods
- 7. An inability to absorb iron

SYMPTOMS:

- 1. Pale skin
- 2. Breathlessness
- 3. Tiredness
- 4. Fatigue
- 5. Headache
- 6. Dizziness
- 7. Feeling faint
- 8. Depression
- 9. Slow reflexes
- 10. Palpitation

TREATMENT:

Vitamin B12 – The supplements of vitamin B12 are used to treat acute anemia. Example- Meat, eggs, milk, yogurt and cheese.

- 1. Folic acid Folic acid is beneficial to produce and maintain new cells that which body needs.
- 2. Vitamin C Vitamin C is rich in vegetables and fruits. Example Kiwis, strawberries, lemon, mandarins and other citrus fruits.
- 3. Honey Honey is significant tool against anemia which contains iron, copper and manganese.
- 4. Legumes and nuts Example Dry dates, almonds, whole grains, cereals, peanuts, walnuts, pulses.

II. CONCULSION:

Anemia is related to the blood disease that is spread all over the world. It can be avoided by taking precautions and awareness in the public. Anemia should be detected and treated as soon as possible to create a healthy generation. The administration of IDA is concentrated to increase the Hb levels, red blood cell levels, iron storage and comorbid conditions. Anemia should be diagnosed by endoscopy in the male and female patients. The therapies which are used currently that are first-line therapy, intravenous iron therapy and blood transfusion.

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