



# **Libyan International Medical University Faculty of Basic Medical Science**

Relation between iron deficiency anima and hair loss

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### **Abstract:**

Iron is involved in many critical physiologic processes within the hair follicle, suggesting that iron deficiency could disrupt hair synthesis it is the most common nutritional deficiency due to either to increased need for iron by the body or adecreased absorption or amount of iron taken(1) in iron deficiency is a concern because can causes fatighue that impairs the ability to do physical work, pale skin, headache, cold hand and feet hair loss and other condition in this report will disscus the rerelation between hair loss and iron difficacy a, the risk factor of iron deficiency which include Women. Because women lose blood during menstruation, women in general are at greater risk of iron deficiency anemia, nfants and children. Infants, especially those who were low birth weight or born prematurely, who don't get enough iron from breast milk or formula may be at risk of iron deficiency Frequent blood donors. People who routinely donate blood may have an increased risk of iron deficiency anemia since blood donation can deplete iron stores.. and how we can prevent it and how iron deficiencies causes hair loss most study found that there is a strong correlation between hair loss and low iron stores as a large proportion of women reporting hair loss had low ferritin (iron storage) levels, compared with the levels generally found in women. without hair(3).

### Introduction:

Iron deficiency anemia is a common type of anemia when the body dos not have enough iron to produce hemoglobin adeficiency reslt ,oxygen can not be transfeered to body cell for growth and repair hair follicles are madeup of cells that require hemoglobin as well which mean that low iron level often result in hair fallingout and slow hair growth(1). while the condition may be common many people don't know they have iron deficiency anemia according to American society hematology most people don't realize they have mild anemia until they have aroutine blood test the symptoms of moderate to severe iron deficiency anemia include general fatigue, weakness, pale skin, shortness of breath, dizziness, atingling or crawling feeling in leg, brittle naile ,headaches and cold hand and feet the main risk of thes condition Women. Because women lose blood during menstruation and during childbirth, Infants and children. Infants, especially those who were low birth weight or born prematurely, who don't get enough iron from breast milk, Frequent blood donors. People who routinely donate blood may have an increased risk of iron deficiency anemia since blood donation can deplete iron stores(2)Mild iron deficiency anemia usually doesn't cause complications. However, left untreated, iron deficiency anemia can become severe and lead to health problems, including Heart problems. Iron deficiency anemia may lead to a rapid or irregular heartbeat, Problems during pregnancy. In pregnant women, severe iron deficiency anemia has been linked to premature births and low birth weight babies. But the condition is preventable in pregnant women who receive iron supplements as part of their prenatal care, so you can reduce your risk of iron(3). deficiency anemia by choosing iron-rich foods such as Red meat, Dark green leafy vegetables, such as spinach. You can enhance your body's absorption of iron by drinking citrus juice or eating other foods rich in vitamin C at the same time that you eat high-iron foods. Vitamin C in citrus juices, like orange juice, helps your body to better absorb dietary iron.

## **Discussion:**

study (1) Mon 30 April 2018 By Rachel Nall, RN, BSN, CCRN Iron deficiency anemia is

takes several months because the ferritin levels can only be raised gradually and once the correct level is a condition that occurs when a person does not have enough iron in their body, or their body cannot use iron properly according to this study hair follicle cells can be particularly sensitive to decreasing levels of iron and may not be able to grow new cells as effectively when iron stores are low research dose suggest that iron deficiency hair loss seems to be related to hair loss that not scar the hair follicles this is promising for regrowth. Study (2) May 17, 2014 - If you're losing hair, you may have an iron deficiency. American study done by Dr. Bergfeld studied 30 consecutive women with documented diffuse telogen hair loss in comparison with 30 women without hair loss. Study subjects had no history of nutritional supplement intake or chronic underlying diseases, and had normal thyroid function and inflammatory profiles. Biochemical investigations were performed in all study women. The mean ferritin level and transferrin saturation was statistically significantly lower in patients with diffuse telegenic hair loss than in subjects without hair loss .study (3) in 2017 more than 80 female age between (14to45) presented with hair loss with low ferritin (iron storage) levels if the iron deficiency is corrected and the serum ferritin level raised, hair growth will improve. This improvement reached and hair growth starts, it takes 2-3 months for the shedding to reduce and another 3-6 months for the new hair to reach a length that contributes to hair volume.

# **Suggested Readings:**

- 1- https://www.mayoclinic.org/diseases-conditions/iron-deficiency-anemia/symptoms-causes/syc-20355034
- 2-https://www.askmags.com/index.php/training/trichology/2064-hair-loss-due-3-https://www.ncbi.nlm.nih.gov/pubmed/200219 to-iron-deficiency

