

SUMMARY AND CONCLUSION

Alopecia is a non life threatening condition, which may seem trivial to the unaffected. However, those physicians who see patients with hair loss know too well the devastating impact it can have on an individual's quality of life. Telogen effluvium is an abnormality of hair cycling that results in excessive loss of telogen hairs. It is one of the most common causes of diffuse hair loss. Many cases of telogen effluvium are subclinical, so the true incidence in the community is unknown.

Iron deficiency represents the most common nutritional deficiency. The most common causes of iron deficiency in premenopausal women are menstrual blood loss, pregnancy and lactation while in postmenopausal women decreased absorption and gastrointestinal loss are the most common causes. Risk factors for iron deficiency include heavy menstrual bleeding (≥ 80 ml per month), use of an intrauterine device, history of iron deficiency anemia and insufficient iron intake.

Ferritin, an iron storage protein, is the primary iron storage mechanism and it is critical to iron homeostasis. Ferritin makes iron available for critical cellular processes while protecting lipids, DNA and proteins from the potentially toxic effects of iron. Clinically, serum ferritin is most commonly obtained in combination with other iron parameters to gauge the iron status of a specific patient. Serum ferritin is regarded as the most sensitive and specific of the various blood tests available to diagnose iron deficiency.

Low iron stores have been considered a possible contributing factor for diffuse telogen effluvium. Therefore, assessment of serum ferritin levels is generally recommended as a part of the routine investigations and dermatologists commonly prescribe iron supplementation under the assumption that low iron stores may cause hair loss.

This study was conducted to study the relationship between ferritin levels and diffuse telogen hair loss in non menopausal females. The study included 65 non menopausal female patients with chronic telogen hair loss and 17 healthy controls. All studied individuals were subjected to history taking, scalp examination, hair pull test and trichogram, laboratory investigations in the form Hb, TSH and C-reactive protein and serum ferritin. The degree of hair loss was evaluated by a set of descriptive questionnaire.

The result of this work showed the following:

- 1- All patients had a positive hair pull test.
- 2- All patients had a rate of telogen hair more than 15% in trichogram.
- 3-There was no statistically significant difference between patients and controls as regard hemoglobin level.
- 5-There was a statistically significant difference between moderate, severe and control group as regard ferritin levels.
- 6-There was a statistically highly significant difference between moderate and severe groups as regard ferritin levels.

According to the previous finding a decrease in ferritin levels might be considered a potential risk factor for excessive hair loss.