

HAIR DISORDERS

## FERRITIN LEVELS IN DIFFUSE NON-SCARRING ALOPECIA IN WOMEN – A SUBJECT OF DEBATE.

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INTRODUCTION: Iron is known upregulate gene expression of hair bulb and thus playing a role in the hair cycle. Serum ferritin concentration is an early indicator of the status of iron stores and is a specific indicator of depleted iron stores even in presence of normal haemoglobin. Ferritin level of  $>70 \ \mu g/L$  is required for normal hair cycle.

AIM: The aim of the study was to determine if iron deficiency is more common in females with Female Pattern Hair Loss(FPHL) and Chronic Telogen Effluvium(CTE) as compared with subjects without hair loss.

METHODS: A case control study was performed including 22 patients with FPHL, 34 patients of CTE and 20 controls without hair fall. Only female patients above 18 years were included. A full history and clinical examination was done. All patients underwent hemoglobin and iron profile testing.

RESULTS: The mean haemoglobin levels of patients with FPHL= 12.6 gm/dl, CTE= 13.2 gm/dl & control group= 12.71. Mean ferritin levels of patients with FPHL= 35.14  $\mu$ g/L, CTE= 34.10  $\mu$ g/L & control group= 55.59. Ferritin levels of <12  $\mu$ g/L was used to describe iron deficiency and <70  $\mu$ g/L indicated levels lower than required for normal hair cycle. Ferritin levels <12  $\mu$ g/L was seen in 4, 7, 1 of FPHL, CTE & control subjects and ferritin levels between 12-70 were seen in 18(81.8%), 27(79.4%), 15(75%) of FPHL, CTE and control subjects.

CONCLUSION: There have been studies done correlating ferritin levels with hairloss with discrepant results. This study showed lower iron stores in patients with FPHL & CTE as compared to control subjects.





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