



DERMOSCOPY AND SKIN IMAGING

COMPARATIVE STUDY OF TRICOSCOPY FINDINGS IN FEMALE PATTERN ANDROGENIC ALOPECIA (AGA) AND CHRONIC TELOGEN EFFLUVIUM (CTE).

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Background: Chronic hair loss frequently affect female patients, majority of whom are affected by female pattern androgenic alopecia (AGA) and telogen effluvium(CTE). It is important to differentiate as treatment and prognosis differ in both disorder. Tricoscopy is a hair image analyzer which allows visualization of hair shaft at higher magnification and performing measurement such as hair shaft thickness, density of hair, percentage of vellus hair and pilosebaceous unit per unit area, epidermal portion of hair and perifollicular epidermis.

Aims and Objectives: To compare tricoscopic findings in female pattern androgenic alopecia (AGA) and chronic Telogen Effluvium.

Material and Methods: Total 60 clinically diagnosed female patients between age 25-40 years were included in study, 30 with AGA and 30 patients with telogen effluvium. These findings were also compared with tricoscopic analysis in 30 healthy female. Result was analysed on tricoscopic parameters (DermaIndia) like hair shaft thickness(300x), hair density(50x), percentage of vellus hair(50 and 300x) and pilosebaceous unit per unit area(50x) in frontal, right and left temporal region of scalp. Statistical analysis was performed with the use of Student's t-test for paired samples and with analysis of variance (ANOVA).

Result: Density of hair was reduced by 50 % in AGA while in CTE it was reduced by 20 % in frontal region of scalp. Mean hair shaft thickness was significantly reduced in AGA (0.04 \pm 0.01) as compared to Telogen Effluvium(0.06 \pm 0.01) with $p < 0.001$. Percentage of Vellus hair (< 0.03 mm) was significantly high in AGA (24.2 \pm 10%) compared to Telogen Effluvium (11.6 \pm 4.1%) with $p < 0.001$. Mean percentage of single hair Pilosebaceous unit was highest in AGA (62.5 \pm 16.7) than in telogen effluvium (39.9 \pm 12.1%).

Conclusion: Tricoscopy is easy, cost effective, non invasive diagnostic tool in differentiating between AGA and CTE.

