

HAIR DISORDERS

## HISTOPATHOLOGY PEARLS FOR FEMALE ANDROGENETIC ALOPECIA DIAGNOSIS

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Introduction: Female androgenetic alopecia (FAGA) is a disease characterized by hair miniaturization and a decrease in hair density in the scalp. The scalp biopsy has been accepted as a gold standard for AFP diagnosis, but sometimes its microscopic diagnosis is not straightforward.

Objective: To describe six main histopathology features of FAGA.

Materials and methods: One to three scalp biopsies were performed in 34 women with a first clinical diagnostic impression of FAGA.

Results: Thirty-four women with an average age of 49 years were included. Main histopathology features were: 1- Normal number of follicles but wide variability in hair-follicles diameter. 2- Miniaturization: Terminal hair follicles shaft diameter greater than the inner root sheath (>0.06 mm). Miniaturized hairs have a hair shaft diameter equal to or less than the thickness of the inner root sheath (<0.03 mm). Indeterminate hairs have an intermediate morphology (0.03-0.06 mm). 3- Peri-infundibular lymphohistiocytic inflammatory infiltrate. 4- Reduction in the duration of the hair follicle cycle (Increase in the telogen hair-count). 5- Although initially the number of hair follicles is normal, in longstanding disease there can be a real reduction. Sometimes the appearances may be more suggestive of a scarring alopecia. 6- Hyperplasia of the eccrine glands may also be observed.

Conclusions: The histopathologic features described in this work can assist clinicians and dermatopathologists in the evaluation of patients with FAGA.





