Chapter 10
Female Pattern Hair Loss
Elise A. Olsen

Synonyms
female pattern hair loss, androgenetic alopecia, androgenic alopecia, common baldness in women, diffuse alopecia in women, female pattern baldness, diffuse hormonal alopecia

Key Features
- Decrease in hair density in the central (vertex, mid and frontal) scalp, bitemporal and parietal regions in women.
- Miniaturization of affected hairs.
- Two ages of onset: early (post-puberty to third decade) and late (age 40+ years).
- Signs of hyperandrogenism (hirsutism, irregular periods) or hyperandrogenemia occur in a subset of women with female pattern hair loss (FPHL) but most women with FPHL have neither.
- Many, but not all, affected women respond to antiandrogens or 5α-reductase inhibitors with increased hair growth indicating an androgen etiology in at least some cases of FPHL.

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Female pattern hair loss (FPHL) is a broad term for the decrease in central scalp hair density that occurs in many females post puberty [62]. Many other terms have been used for this particular type of alopecia including androgenetic alopecia (AGA) and androgenic alopecia, both terms which imply a specific androgen-related and genetic etiology. While certainly a proportion of women with this hair phenotype have the female counterpart of male AGA, i.e., they clearly respond with hair growth to antiandrogens or 5α-reductase inhibitors, it has not been proven that all women with this pattern of hair loss clearly have an androgen-related process [62]. Therefore, the term FPHL, while inclusive of AGA in women, allows for further thought and research on this hair loss condition without implying causality.

FPHL affects >50% of women over the age of 50 years and while the hair loss may seem trivial to the observer, it is often emotionally devastating for the affected women. FPHL may occur alone or may be part of a constellation of androgen-related conditions. The diagnosis of FPHL is not clear-cut as it is in men with male pattern hair loss (MPHL) but requires a history, physical exam, laboratory work, and often a scalp biopsy to differentiate it from other causes of hair loss. Current treatments for FPHL are limited in number and degree of efficacy.

10.2 History

Beek in 1950 noted that baldness and calvities frontalis in women increased dramatically from the fourth to the sixth decades [6]. In his 1951 review of 214 Cau-