Alopecia and Hirsuties
Current Concepts in Pathogenesis and Management

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Summary

Hirsuties and androgenic alopecia are the patterns of hair growth in women which develop in a similar manner to that normally seen in men. This process is mediated by androgens. It may be due to increased hormone production or increased target organ sensitivity.

The majority of patients with hirsuties may be adequately managed with a careful explanation of their condition and advice about depilatory techniques. Some will benefit from a course of systemic antiandrogen therapy, but hair growth will resume on cessation of therapy.

There have been few objective studies to evaluate the benefits of antiandrogen therapy in female baldness and none with minoxidil.
Alopecia and Hirsuties

Androgenic alopecia, or common baldness, and hirsuties are the result of stimulation of the hair roots by male hormones. They often occur together and share a similar pathophysiology and treatment. It is therefore convenient to consider them together. Both conditions occur in either sex but only on a man’s body is excess hair considered by the affected individual to be socially acceptable. Hair now serves no physiological role in humans but has immense cosmetic importance, and there is considerable preoccupation with both over- and under-growth of hair in both sexes.

1. Clinical Features and Definition
   1.1 Androgenic Alopecia

   Only in this century has it been realised that scalp hair loss over the vertex is mediated by male hormones. At the turn of the century, the French dermatologist Sabouraud noted that the Sultan of Turkey’s eunuchs kept their hair with the loss of their manhood. However, he later recanted in favour of the popular hypothesis of the time that infection by Pityrosporum was the cause of baldness. It was not until the early 1940s that convincing evidence was provided by Hamilton (1942) that balding was a normal process linked to androgens. This author later produced a semiquantitative grading system which described the temporal and spatial pattern of hair loss (Hamilton 1951). It is now recognised that women develop patterned balding both in the same manner as men (Venning & Dawber 1987) and in a more diffuse vertical style (Ludwig 1977). The fact that normal women develop scalp balding is disguised by hats, wigs and careful coiffure, but close inspection will reveal that as many as 13% of premenopausal and 37% of postmenopausal women show signs of ‘male-pattern’ hair loss (Venning & Dawber 1987).

   The diffuse vertical pattern of balding is characterised by an even loss over the vertex with maintenance of the frontal margin and no frontoparietal recession. In women, this pattern may result in considerable thinning but does not lead to complete loss of hair cover. However, this is not the case for men. When men are affected with diffuse vertical alopecia, this is usually an early event in the late teens or 20s and generally results in rapid and complete vertical baldness, whereas the Hamilton pattern with frontoparietal recession and tonsure hair loss may progress and stop at any stage. Most men have established their pattern of balding by the age of 30, although more diffuse and less dramatic hair loss may occur later. Women may develop marked temporal recession but only rarely tonsure loss.

   1.2 Hirsuties

   The relationship of body hair growth to hormones was also elaborated this century. Hirsuties may be defined as the growth of coarse terminal hair on women in a similar manner to that which develops on the normal postpubertal man. The evolution of hair growth occurs in the same pattern and order as in the male and follows an orderly sequence (see section 2 below). Should the pattern differ from this sequence, a non-hormonal cause for the increased hair growth should be sought.

   The main problem when considering this condition lies in the separation of hirsuties from normality. The development of a male pattern of hair growth in the female is not a disease process per se: it is a spectrum of normality of which the hairy extreme end is frequently associated with an endocrinopathy, e.g. polycystic ovarian disease. The exact point at which an individual woman is to be considered hirsute is blurred.

   Perception of hirsuties is subjective and women present with a wide variation in severity. Both the severity of the hirsuties and the degree of acceptance may be dependent on racial, cultural and social factors. Even the criteria for the definition of hirsuties used by physicians vary widely (Ferriman & Gallwey 1961; Lunde & Grottum 1984; McKnight 1964; Shah 1957). Should a woman be considered hirsute if she or her physician feels that she is too hairy?

   In order to resolve this issue, different groups have evolved different grading schemes for hair