

antiandrogens were no more effective than other OCs, and OCs containing levonorgestrel were equally effective as other OCs for the treatment of hirsutism. The results of the review serve as the evidence base for the recommendations about pharmacologic therapy.

Definition, Pathogenesis, and Etiology of Hirsutism

Hirsutism is excessive terminal hair that appears in a male pattern in women (3) (Table 1). Some sexual hair growth is normal, but clinicians commonly diagnose hirsutism as a Ferriman–Gallwey score (4) above the 95th percentile for the population (Fig. 1) (5, 6). Ferriman–Gallwey total scores that define hirsutism in women of reproductive age are as follows: United States and United Kingdom black or white women, ≥ 8 (6); Mediterranean, Hispanic, and Middle Eastern women, ≥ 9 to 10 (6); South American women, ≥ 6 (7); and Asian women, a range of ≥ 2 for Han Chinese women (6) to ≥ 7 for Southern Chinese women (8, 9). Although widely used, this scoring system has its limitations, which include its subjective nature, the failure to account for a locally high score that does not raise the total score to an abnormal extent, and the lack of consideration of such androgen-sensitive areas such as the sides of the face from the hairline to below the ear (sideburns) and the buttocks. Self-scoring can be clinically useful, but correlates only modestly with scoring by a trained observer (10–12).

Lower Ferriman–Gallwey scores can be clinically important. In one study of 633 unselected white and black women, $\sim 70\%$ with scores ≥ 3 and many with lower scores considered themselves to be hirsute, and most used some form of cosmetic treatment (13). It has also been shown that even minimal degrees of unwanted hair are often associated with hyperandrogenemia when menstrual irregularity is present (14).

Hirsutism must be distinguished from hypertrichosis—generalized excessive hair growth that may be hereditary or result from certain medications (e.g., phenytoin, cyclosporine). Hypertrichosis is distributed in a generalized, nonsexual pattern (i.e., predominantly on forearms or lower legs) and is not caused by excess androgen (although hyperandrogenemia may aggravate it).

Pathogenesis of hirsutism

The growth of sexual hair is entirely dependent on the presence of androgen

Table 1. Definition of Terms	
Term	Definition
Hirsutism	Hirsutism is excessive terminal hair that appears in a male pattern (excessive hair in androgen-dependent areas; i.e., sexual hair) in women.
Ferriman–Gallwey score	The modified Ferriman–Gallwey score is the gold standard for evaluating hirsutism. Nine body areas most sensitive to androgen are assigned a score from 0 (no hair) to 4 (frankly virile), and these separate scores are summed to provide a hormonal hirsutism score (Fig. 1).
Local hair growth	This is unwanted localized hair growth in the absence of an abnormal hirsutism score.
Patient-important hirsutism	Unwanted sexual hair growth of any degree that causes sufficient distress for women to seek additional treatment.
Hyperandrogenism	Hyperandrogenism (for the purposes of this guideline) is defined as clinical features that result from increased androgen production and/or action.
Idiopathic hirsutism	This is hirsutism without hyperandrogenemia or other signs or symptoms indicative of a hyperandrogenic endocrine disorder.

(3, 15). Androgens appear to induce vellus follicles in sex-specific areas to develop into terminal hairs, which are larger and more heavily pigmented. Hairs grow in nonsynchronous cycles, and the growth (anagen) phase (which varies with body area) is ~ 4 months for facial hair. Due to the long hair growth cycle, it takes ~ 6 months to detect the effects of hormonal therapy and

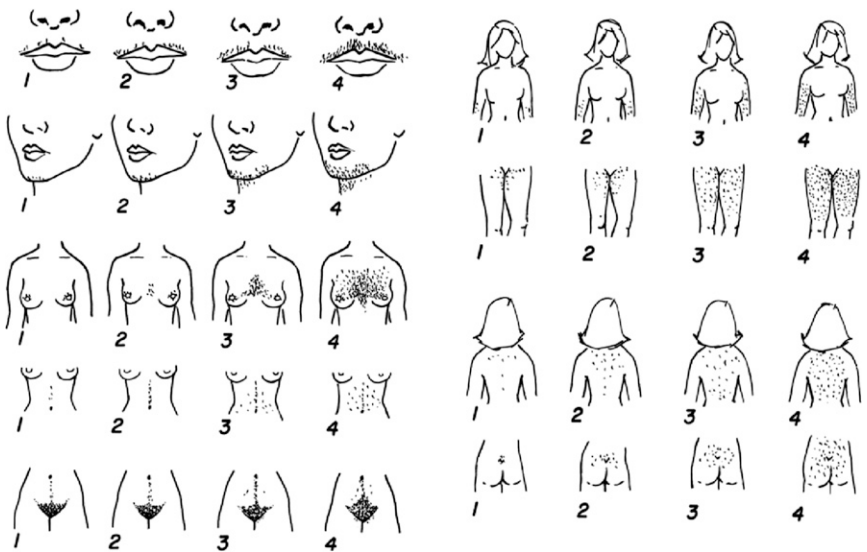


Figure 1. Ferriman–Gallwey hirsutism scoring system (4). Each of the nine body areas most sensitive to androgen is assigned a score from 0 (no hair) to 4 (frankly virile). These separate scores are summed to provide a total hormonal hirsutism score. Generalized hirsutism (score ≥ 8) is abnormal in the general US population, whereas locally excessive hair growth (score < 8) is a common normal variant. The normal score is lower in some Asian populations and higher in Mediterranean populations (see text). Reproduced from Hatch et al. (5).