

Prevalence of hirsutism in Sri Lankan female university entrants

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Sri Lanka Journal of Dermatology, 2005, 9, 16-17

Introduction

Hirsutism in young women is a cause of much unhappiness. It is defined as the presence of terminal (coarse) hairs in females in a male-like distribution. The degree of hirsutism is usually determined using the most widely used scoring system developed by Ferriman and Gallwey or Thomas and Ferriman¹⁻³. Hirsutism is usually a clinical sign of a benign condition and is not accompanied by signs of virilisation such as clitoromegaly, deepening of voice, temporal hair loss, loss of female body contour^{4,6}.

However, abnormal patterns of hair growth raise the suspicion of endocrine dysfunction, and therefore, is an indication for specialized investigation⁷. To establish a baseline for the selection and treatment of such cases, it is important to know about the hair distribution in a normal population of women. Studies demonstrate that there is racial and genetic variation of hair distribution in females; reported prevalence varies from 5% in European women and in one report, 59% in Middle Eastern women⁸⁻¹⁰.

This report is part of a study where we assessed the pattern of body hair distribution in a population of female university entrants and graded them on Thomas and Ferriman system. This will be followed by a study which looks in to the aetiological factors of hirsutism in a similar population.

Methods

Eighty-five female entrants to the faculty of medical sciences at University of Sri Jayewardenepura were studied for body hair distribution during their medical screening with their consent. All the subjects were examined by a Consultant Dermatologist and a lecturer and hirsutism was calculated using the Thomas and Ferriman system² where five areas of body (chin, upper lip, sideburns, chest and abdomen) are scored from 0 to 4 depending on the degree of hair growth, scoring a total out of 20. Only terminal (coarse) hair of 0.5 cm minimal length was considered as

hirsutism. The population of 85 was also studied for hair distribution in the non-androgen dependent areas (forearms and legs) and scored out of 8. All of them were examined for the presence of physical features suggestive of androgen excess such as acne, clitoromegaly, deepening of voice, temporal hair loss or alopecia. A questionnaire was used to ask for the following; drug history, presence or absence of irregular menstrual cycles, use of hair removal methods such as depilatory cream, or shaving. They were also asked whether they were conscious that they had excess body hair or embarrassed by it.

Results

Of the 85 females studied, score of 5 or more out of 20 on Thomas and Ferriman system was found in 36 (42.4%) and 8 or more in 11 subjects (13%). Score of 10 or more was found in 5 (6%). All those scored 8 or more, had high scores on abdomen, chest and sideburns. The difference between those with scores of 8 and 9, and those above 10 is that the latter had higher scores at lip and chin.

In the non-androgen dependent areas, ten (12%) had a score of 6 or more out of a total of 8. Twenty-nine (34%) had a score of 4-5, and the rest of 46 (53%) had a score of 3 or less in these regions.

18 (21%) of the total population said that they were either conscious of excess body hair or embarrassed by it. Out of these 18, seven (39%) had both a hirsutism score of ≥ 8 and a hypertrichosis score of ≥ 4 . Another nine (50%) had a hirsutism score ≥ 8 but a score of < 4 on the extremities. Two (11%) who had low scores of each but were embarrassed of the hair had either mild increase in facial hair or mild but generalized increase in body hair which was responsible for their embarrassment. Twenty eight (33%) subjects were using either shaving or a cream as a depilatory method. Out of these 28, eight (29%) had a hirsutism score of ≥ 8 and seventeen had a score of ≥ 4 (61%) on the extremities.

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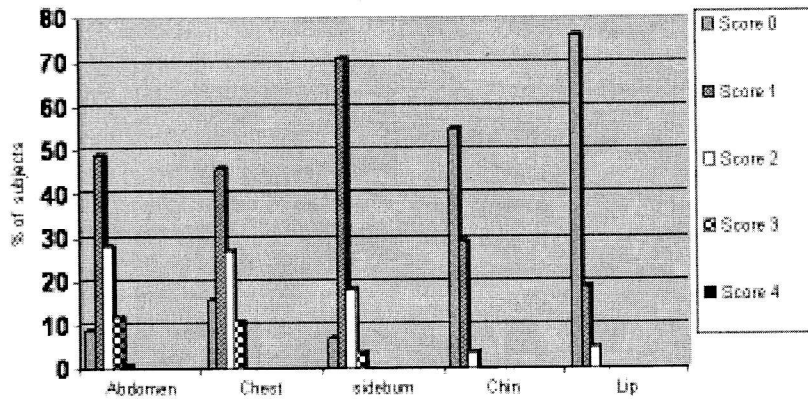


Figure 2. Scores of hair growth in each region.

Discussion

Hirsutism is a common problem in women in the community and is a cause of mental agony and a range of social problems. Our study shows the prevalence of hirsutism among Sri Lankan young women is 13%, considering scores of 8 or more represent hirsutism. Ferriman and Gallwey in 1961 reported a prevalence of 1.2% among women in London¹. Zargar et al found women in Kashmir, in India have a prevalence of 10.5%¹¹. Reports suggest hirsutism in East Asian women is relatively uncommon¹². Community based prevalence studies done in various countries suggest racial factors may play a part. This study also emphasizes the fact that South Asian women have more hair than the European counterparts.

Sri Lankan women show more hair growth in the abdomen and chest areas than the face except for the sideburn area. In a clinic based study done among patients with hirsutism in Sri Lanka, Weerasooria et al found women presented to the clinic because of hair found mainly in the sideburn area and upper lip¹³.

Twenty one percent of women felt that they were particularly 'hairy' and 33% were using a depilatory method to remove excess hair. In McKnight's report 9% of European students felt that they were particularly 'hairy'^{3,9}. These figures show that there is difference between physicians' definition and women's perception of excessive hair. Further studies are required to determine the cut off score above which further clinical evaluation is needed.

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