

DIFFUSE HAIR LOSS AND PSYCHIATRIC DISTURBANCE

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Abstract. 32 women complaining of diffuse alopecia were assessed by a psychiatrist, and daily hair loss and root counts were measured and compared with control women. Seven of the 32 women had severe marital difficulties, and 2 of these were overtly depressed. In these 7 women, daily hair loss and telogen counts did not differ significantly from the values for control women, whereas the remaining 25 women had a significant increase in hair loss and telogen counts. It is suggested that those women whose complaint of hair loss seems disproportionate to the objective degree of alopecia should be questioned as to symptoms of depression and marital difficulties.

Key words: Hair; Hair loss; Psychiatry

Hair loss in women is common and causes a great deal of anxiety. When hair loss is sufficiently severe as to cause obvious thinning, two main patterns are evident. Either there is diffuse thinning over the vertex of the scalp with retention of the normal hair line or there is frontal recession with some central thinning similar to that seen in hereditary baldness of the male and this type, as in the male, appears to have an hereditary component (7).

In contrast to this hereditary male-pattern baldness, generalised diffuse thinning of the vertex of the scalp is the subject of controversy and many underlying causative factors have been proposed, including the ingestion of amphetamines for weight reduction (1), trauma or traction on the hair (5, 6), hypothyroidism (2), and the cessation of oral contraceptives (3). Although there is a widespread belief that emotional factors can affect hair loss, no investigation seen so far has taken into account the mental state of these women.

The aim of the present investigation was the psychiatric assessment of women with diffuse hair thinning of the vertex of the scalp together with the retention of a normal hair line.

INVESTIGATION

During a 2-year period, 58 women with complaints of hair loss and who had been referred to the dermatological clinics of the United Bristol Hospitals, were investigated. Twenty-six of these were excluded from the series as they were found to show male-pattern baldness or post-partum alopecia, or to be suffering from a diffuse form of alopecia areata. The remaining 32 were studied as follows:

(1) A full psychiatric history was taken by a psychiatrist (J. E.).

(2) The daily hair loss was assessed by asking each patient to collect any hairs that fell onto her clothing or were found in a brush or comb over a 7-day period. The hairs were then counted and the mean daily loss then obtained.

(3) Microscopic examination of 100 hairs plucked at random from the scalp was performed in each patient, the hair having been shampooed within the previous 2 days. The roots were classified as anagen, telogen, or catagen.

(4) Blood was taken for full blood count and ESR, serum cholesterol, serum thyroxine and free thyroxine index.

A control series of 32 female members of the hospital staff of comparable ages were also studied. Their scalps were examined clinically, and daily hair loss and mean percentage telogen counts were also estimated.

RESULTS

All but 2 of the women complaining of thin hair were found on examination to have some degree of alopecia, and 3 of the 32 control subjects also had a mild or moderate degree of alopecia.

Seven of the 32 patients studied were found on interview to have severe, usually longstanding, marital difficulties, and 2 of these showed all the classical features of a depressive illness. Two of these 7 women showed no clinical evidence of alopecia. It was thought worthwhile to analyse the hair and root counts of these 7 women separately, comparing them with the results in the remaining 25 patients

Table I. *Women with diffuse alopecia of the vertex*

	No.	Age	Mean daily hair loss	Mean percentage telogen count
Alopecia patients with psychiatric disturbance	7	Mean 41 (range 27-61)	38.3 ± S.D. 16.8	11.6 ± S.D. 4.5
Alopecia patients with no psychiatric disturbance	25	Mean 38 (range 17-63)	69.3 ± S.D. 57.8	14.0 ± S.D. 8.8
Control women	32	Mean 39 (range 19-60)	39.9 ± S.D. 29.3	8.3 ± S.D. 6.9

and with those of the control series of women. The results are recorded in Table I.

The mean daily hair loss of the alopecia patients without marital disturbance was 69.3 ± S.D. 57.8 and this was significantly greater than the loss in the control women, 39.9 ± S.D. 29.3 ($t=2.4$, $p<0.05$). By contrast, the mean daily loss in the patients with marital difficulties, 38.3 ± S.D. 16.8, was very close to the value obtained in the control group ($t=1.3$, $p<0.05$).

Similarly, the mean percentage telogen count in the alopecia patients without marital difficulties was 14.0 ± S.D. 6.9 ($t=2.7$, $p<0.01$), whereas the mean percentage telogen count in the patients with marital difficulties, 11.6 ± S.D. 4.5, was not significantly different from the control value ($t=1.2$, $p<0.05$). The percentage of anagen hairs having a root sheath was roughly the same in each of the three groups (ca. 20%), and no significant differences emerged. Very few catagen hairs were seen in any of the three groups (<1%).

The blood tests revealed no abnormality in any patient, with the exception of one woman without psychiatric symptoms who was found to have mild hypothyroidism.

DISCUSSION

This study has shown that in women with diffuse alopecia but without marital difficulties, the mean daily hair loss and the percentage telogen count were significantly greater than in control women. By contrast, in 7 women who complained of thin hair and who were found to have severe marital difficulties, mean daily hair loss and percentage telogen count did not differ significantly from those in control women, and 2 of these 7 women had no clinical evidence of alopecia. Three of the control women had clinical alopecia, but they were not unduly worried by this and had not sought medical advice.

These observations lend no support to the hypothesis that emotional factors cause hair loss, and they suggest that women with marital difficulties who complain of hair loss are less likely to have objective evidence of alopecia than are women with a similar complaint who have no marital problems. A possible explanation for this difference is that women who are worried by marital problems tend to project their apparently insoluble domestic problems as a complaint of hair loss. The possible psychological reasons for this will be discussed more fully elsewhere.

Only one woman in this study was found to be hypothyroid, compared with 10% in a previous study (2). However, the latter figure may have been higher because the study was carried out in Sheffield which is an area where the incidence of simple goitre is high (4).

The two women who were depressed both made an excellent response to a course of antidepressant drugs, and when their depression resolved they ceased to worry about their hair, despite the fact that their marital difficulties continued.

This study suggests that women who complain of thin hair, but who show little evidence of alopecia, and women whose anxiety seems disproportionate to their degree of hair loss, should be carefully questioned regarding possible depression or marital difficulties. In the present study, these symptoms emerged only during the course of a lengthy interview and in such patients psychiatric referral may be appropriate.

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