Can Alopecia Areata be Triggered by Emotional Stress?

An Uncontrolled Evaluation of 178 Patients with Extensive Hair Loss

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One hundred and seventy-eight patients with severe alopecia areata were asked at interview whether they attributed their first attack of hair loss to an emotional trauma. Twelve patients (6.7%) reported a severely disturbing event during the 6 months preceding the first symptoms of their disease. No patient reported that episodes of hair loss coincided with stressful life events. Emotional triggers were not especially correlated with any particular type of alopecia areata. The present study does not therefore provide evidence of a significant role of emotional stress in the pathogenesis of alopecia areata.

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The question whether psychological factors play an important part in the pathogenesis of alopecia areata (AA) is a controversial issue. The results of psychiatric studies have been rather contradictory, ranging from the finding that as few as 7% were free of mental illness (1), to the conclusion that there was no evidence that psychological factors played any significant part in causing or precipitating the disorder (2). Although the incidence of acute emotional stress preceding an attack of AA has been found in a similar variation of 5–96% (3–8), most authors regard emotional trauma as an important triggering factor in the pathogenesis of AA. Anecdotal reports describing an attack of AA shortly after a severely disturbing event have strengthened this assumption.

The aim of the present study was to determine the significance – if any – of acute emotional stress in the pathogenesis of severe AA.

PATIENTS AND METHODS

One hundred and seventy-eight patients, receiving topical immunotherapy for a severe type of AA with a scalp involvement of 40% or more, were questioned by the same interviewer. Patients were asked the following question: "If you think of the first attack of hair loss, do you attribute this to a particular event that took place at that time?" Events which had occurred within a period of 6 months preceding the first hair symptoms of AA were recorded. Moreover, the number of years elapsed since the first attack of AA (= duration), and the type of AA were documented. Fisher's Exact Test was used for statistical analysis.

RESULTS

Twelve patients linked an emotional trauma with the first attack of AA: 7 patients attributed their disease to the death of a loved one; breaking off a relation or divorce were mentioned by 3 patients; one patient reported that he had been pro-

foundly affected by the discovery and subsequent treatment of a malignant disease; and one patient had become unemployed shortly before his AA developed. The 12 patients who attributed the first symptoms of AA to an emotional event did not show significant differences with regard to the duration or type of AA as compared with the 166 patients who did not report such an occurrence (Table I).

DISCUSSION

The vast majority of the patients proved to have been told before, more or less explicitly, that their disease was due to 'nerves'. Biased recall might therefore result in an over-rather than an under-estimation of emotional triggering factors. Nevertheless the proportion of affirmative answers was small (6.7%).

The absence of a matched control group in the present study is a methodological problem. However, if the incidence of the stressful events that were mentioned by the 12 patients in question had been significantly lower in such a control group, this would only have implied that acute emotional stress might play a substantial etiological role in a very small proportion of severe AA cases. It should be noted that none of the reports favouring the concept of stressful life events as a triggering factor deals with a controlled study, with the exception of the publication by Perini et al. (6).

It is well known that AA can run a capricious course with unpredictable remissions and relapses. Three patients who reported a stressful event preceding the first attack of AA, had had complete spontaneous remissions since then. Interestingly, they did not link subsequent episodes of hair loss to

Table I. Duration and type of alopecia areata (AA) in patients who reported acute emotional stress preceding the first attack of hair loss, as opposed to patients who did not report a stressful life event

	Acute emotional stress $(n = 12)$	No acute emotional stress $(n = 166)$
Duration (mean)	8 yrs	9 yrs
Type of AA		
Patchy	4	56
Subtotal	2	24
Total	0	18
Subtotal-universalis	2	21
Universalis	3	33
Diffuse	0	5
Ophiasis	1	9

other emotional triggers. In other words, not a single patient with a history of remissions and relapses stated that episodes of hair loss coincided with severely disturbing events. This is in agreement with another study (2).

For many patients, considerable time had elapsed since the first attack of AA. Patients who reported an emotional trauma did not have a substantially more recent first attack of AA, suggesting that possible suppression of a disturbing event with time did not play an important role. Table I illustrates that emotional events are not especially connected with a particular type of AA. This finding confirms the results obtained in previous studies (2–4).

Anecdotal reports tend to be a selection of the most spectacular cases, and are as such hardly representative of a population. Indeed, we encountered remarkable case histories, e.g. the conviction of a well-known French yoghurt manufacturer: a young woman, after having discovered that the sudden peculiar taste of her yoghurt was due to the presence of a cockroach in her mouth, subsequently lost all her hair "within a period of three days", and received 425,000 US dollars in compensation for severe esthetic damage (9).

Because for most patients the occurrence of AA presents an unprecedented challenge to their self-esteem, the suggestion that psychological factors might play a role will further en hance uncertainty because of the inevitable implication that they might be somehow to blame for their condition. We feel that the absence of conclusive evidence justifies the more positive statement to AA patients that they are not responsible for their disease nor can they influence its course.

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