Trichotemnomania: Hair Loss Mediated by a Compulsive Habit Not Admitted by Patients

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Trichotemnomania (from Greek – *temnein* – to cut) is hair-loss due to cutting or shaving by patients in the context of obsessive-compulsive disorder. Unlike trichotillomania, it is a little-known self-induced alopecia (1–4). We report here three new cases of trichotemnomania, including the first documented case in a man.

CASE REPORTS

Case 1. A 22-year-old woman presented at the emergency department of our clinic, accompanied by her mother, with sudden loss of hair on the scalp 2 days previously. She did not report any hair loss on other body sites, mucosal or nail alterations, or other symptoms. Medical examination revealed generalized hair loss on the scalp with no signs of inflammation or scarring. Follicle openings were filled with black hair shafts (the scalp appeared to have been shaved, Fig. 1A). Moreover, a posterior view showed isolated tufts of hair (Fig. 2A). The patient reported that she was concerned about the episode; however, she did not show signs of anxiety (unlike her mother). She was diagnosed with trichotemnomania. In a private medical interview, without her mother, she reported that her parents were going through divorce (a stressful personal experience). She did not confess that she cut her hair herself; she raised the use of a new shampoo weeks before as a possible cause of the hair loss. The patient was referred to the Department of Psychiatry, after talking with her mother.

Case 2. A 35-year-old man, accompanied by his father, with a past medical history of obsessive-compulsive disorder and gastroesophageal reflux presented with sudden hair loss. The patient reported initial hair loss in the left parietal region 2 days previously. He reported that a day later all of his hair began to fall out, including the upper half of his eyebrows. Medical examination revealed that the scalp had a shaved appearance, as did his eyebrows, with no inflammation or other pathological signs, except for a slight circumscribed erythema located in some areas of the scalp (Fig. 1B). The hair on the retroauricular region, where it is more difficult to shave, was retained (Fig. 2B). However, he denied having shaved his hair himself. The patient was referred to his usual psychiatrist with a diagnosis of trichotemnomania.

Case 3. A 16-year-old girl with a medical history of bulimia nervosa and bruxism presented at our department with a 2-day history of sudden hair loss on the scalp. The patient did not report any other systemic symptoms, such as alopecia in other locations, or a history of trauma or any other previous diseases on the scalp. Physical examination revealed hair loss on the central parietal and occipital areas of an otherwise healthy scalp (Fig. 1C). Her nails did not show any pathological changes. Closer examination revealed very short broken hairs (with no vellus), as though they had been cut with scissors or a hair-cut machine, as all follicles were present but only 4–5 mm long. The hair-pull test was negative, and there were no exclamation point hairs, nor yellow/black dots with dermoscopy. Trichotemnomania was the initial diagnosis, and this was confirmed in a private interview, when the patient admitted that she had cut the hair herself with a hair-cut machine, motivated by an intrusive idea that she could not avoid. The patient was referred to the Department of Psychiatry.

Table I summarizes some of the clinical features of interest.

DISCUSSION

The three cases reported here belong in the context of obsessive-compulsive disorders. Obsessions are recurrent and persistent thoughts, impulses or images that are experienced as intrusive or inappropriate and cause marked anxiety or distress. Compulsions are negative behaviours or mental acts that a person needs to perform in response to an obsession or according to rules that must be applied rigidly (5). Thus, trichotemnomania is not purely voluntary; it is performed to relieve stress. In this sense, trichotillomania has been defined as hair loss mediated by an intrusive thought that induces hair handling and increased emotional stress if patient tries to avoid the act and a feeling of gratification if patient carries out the act (6).

Curiously, although it is a conscious act, in the cases described here the patients were resistant to admitting to their habit. Such is the case documented by Happle (3), in which the patient had a history of multiple consultations with specialists without reaching the diagnosis.

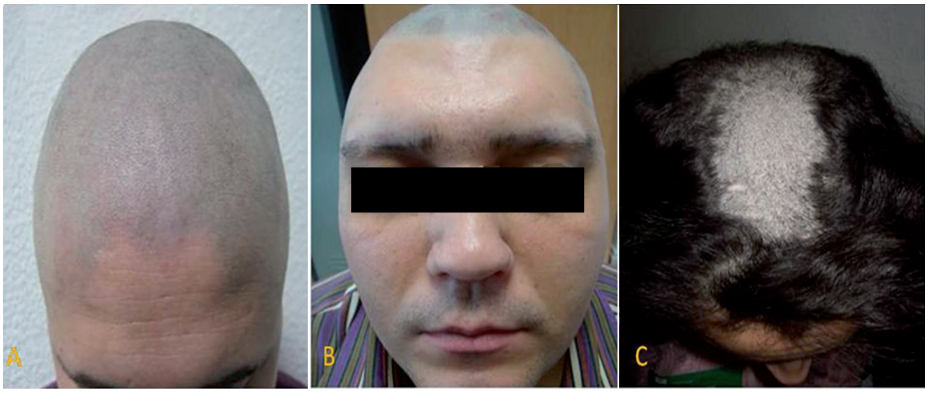

Fig. 1. Case 1 and 2: Mild and circumscribed erythema on the scalp, signs of shaving trauma (A, B) and hair loss on the upper eyebrows (B). Case 3 (C): a healthy scalp appearance with hair loss on the parietal and occipital areas.

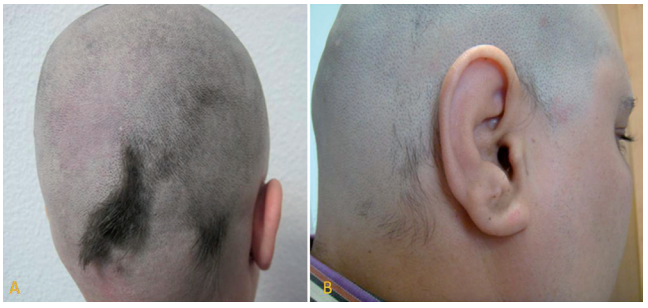

Fig. 2. Case 1 (A) and 2 (B) showing unshaven hair on areas of difficult access, a hallmark of self-induced phenomena.

This feature is shared with trichotillomania, in which resistance to admitting to the habit is documented (7). These patients may be embarrassed by their appearance and habit, and have feelings of guilt (8).

The differential diagnosis is relatively simple. Trichotemnomania is usually a loss of scalp hair, but can also occur in other locations, such as the eyebrows, as in case 2 (Fig. 1B), axilla or pubis (3). The hair is usually cut with scissors or shaved, and the diagnostic key is the presence of follicle openings with filled hair shafts within a healthy-looking scalp.

Trichotillomania is characterized by bald patches with irregular borders, containing hairs of varying length. In case of doubt, histopathological analysis shows an increased number of catagen hair follicles with pigment casts, follicular plugging and trichomalacia (9).

Trichoteiromania presents with bald spots with hair of different length, which may be similar to hair cutting with scissors. White tips are seen at the end of the hair shafts in the form of distal splitting. Light microscopy of the hair shafts shows brush-like splitting of the ends (10, 11).

Another type of hair loss with associated psychiatric comorbidity is trichodaganomania (12), which is characterized by the compulsive habit of biting one's own hair. However, due to its intrinsic mechanism, the hair loss is not located on the head.

Alopecia areata is a further differential diagnostic to take into account. However, upon regrowth, hairs often initially lack pigment, resulting in blonde or white hairs (13), unlike trichotemnomania, which preserves the normal pigmentation of hair.

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Table I. *Summary of clinical features of the patients*

	Case 1	Case 2	Case 3
Age, years/sex	22/F	35/M	16/F
Psychological/psychiatric comorbidity	Parents were in matrimonial divorce (stressful personal experience)	Obsessive-compulsive disorder	Anorexia nervosa (interview suggests symptoms of obsessive-compulsive habit)
Admitted the self-induced mechanism	No	No	No (admitted in a private interview)
Emotional indifference about sudden hair loss	Yes	Yes	Yes
Number of previous medical consultation	It was the first consultation	It was the second consultation, after being treated by his family physician as alopecia areata	She had been treated in multiple times without success (anti-fungal and topical corticosteroids)
Location of hair loss	Scalp	Scalp and eyebrows	Scalp
Partial erythematous scalp	Yes (shaved)	Yes (shaved)	No (cut with hair cut machine)