## **Novel Insights from Clinical Practice**



Skin Appendage Disord 2017;3:36–38 DOI: 10.1159/000455882 Received: December 7, 2016 Accepted: January 5, 2017 Published online: January 28, 2017

# Intermittent Chronic Telogen Effluvium

Alfredo Rebora

University of Genoa, Genoa, Italy

#### **Established Facts**

• In most cases, chronic telogen effluvium (CTE) seems to be the continuous result of one or more stressful events that occurred 3 months before its onset.

#### **Novel Insights**

The reported case confirms graphically that CTE may be an intermittent condition and that a sequence
of stressful events is the likely triggering cause of hair shedding.

### Keywords

Hair · Alopecia · Telogen

#### **Abstract**

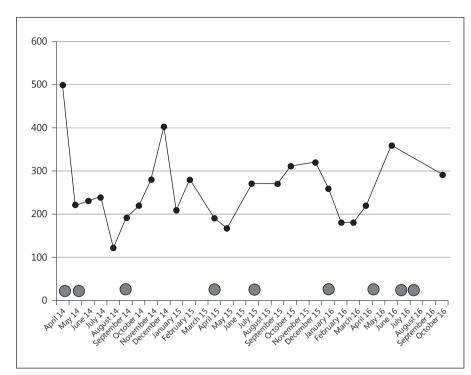
Chronic telogen effluvium is most often intermittent, alternating periods of spontaneous remissions with episodes of unexplained relapses. This article reports the case of a male who was able to graphically depict the sequence of emotional events and the corresponding severity of his telogen effluvium during 31 months. The case is interesting as it documents for the first time the intermittency of chronic telogen effluvium and the pathogenetic role of emotional strains, and it stresses the importance of the modified wash test in evaluating the severity of hair shedding.

© 2017 S. Karger AG, Basel

#### Introduction

Telogen effluvium (TE) is usually regarded as having 2 types of presentation, acute and chronic. Actually, chronic TE (CTE) has, as Whiting [1] put it, a "tendency to fluctuate for a period of years," alternating periods of spontaneous remissions with episodes of relapses. A possible explanation of such relapses lies in episodes of emotional strains, which, ever since Kligman [2] suggested it in his first description of TE, may play an important pathogenetic role [3]. In fact, the clinical experience suggests that not only this is the case, but that even in most of the alternative reasons Kligman proposed, such as childbirth and major surgery, stress is the probable causal origin.

Herein, the author reports a case of CTE, which, while providing an extraordinary graphical evidence of its intermittency, seems to reaffirm the importance of the emotional stress in determining the fluctuation of remissions and relapses.



**Fig. 1.** Graph made by the patient, showing the 31-month-long sequence of hair shedding measurements by MWT. On the ordinate, the number of shed hairs by MWT is shown. On the abscissa, the dates are listed. Large dots indicate the stressful events: April 2014, May 2014, September 2014, April 2015, July 2015, January 2016, February–May 2016, and July 2016.

#### **Case Report**

The patient was a 50-year-old male in apparently good health and mood. He complained of profuse hair loss, which had begun some weeks before. On examination, neither glabrous patches nor a diffuse thinning of the hair were noticed, but the pull test was highly positive. The patient admitted to being apprehensive, but denied any specific cause of such an anxiety. As it is common practice in TE cases, I prescribed a modified wash test (MWT) [4].

The result indicated a profuse hair shedding (500 hairs) with 5% vellus hairs. TE was diagnosed, belonging to the third type of the author's classification [5], with a negligible androgenetic component and, in line with the diagnosed variety of TE, 0.05% clobetasol propionate foam for daily application was prescribed. I suggested to repeat MWT at home monthly and to keep me informed by e-mail. The patient complied with extraordinary accuracy with my recommendation, and, 5 months later, the hair shedding was reduced to almost 100 hairs. In the following months, however, the hair shedding progressively relapsed to reach 400 hairs. I added vitamin D (25,000 IU twice a month) as an allegedly immune modulator, and the hair shedding abated again to attain 180 hairs 4 months later. Three months later, hairs started to shed again, exceeding 300 hairs. My interpretation of the phenomenon was that the patient had stopped both treatments, but he had a different opinion and admitted to having had good reasons to be deeply emotionally involved. The first emotional stress, preceding the first visit, was occasioned by violent quarrels with his wife who he had reason to believe was cheating on him. The second episode was related to an even higher emotional strain when she split up, leaving him with 4 children. When he was probably recovering, the third episode corresponded to her coming back home. While continuing the clobetasol treatment, CTE had other remissions and

relapses, and he kept testing their shedding by MWT, monthly, for more than 2 years. My conclusion is that despite the treatment or regardless of it, the persisting condition of emotional strain related to the patient's marital problems prevented any stable improvement of his hair shedding. Figure 1, provided by the patient himself, exactly depicts the 31-month-long sequence of emotional events and their influence on hair shedding.

#### Discussion

Besides the peculiar succession of events and its graphical display, the case may be of interest for many reasons.

First, CTE occurred in a male. CTE is usually observed in women, because, according to Whiting, "they are more sensitive than men to signs of hair loss ...... but presumably from other causes that are unknown" [6]. I think that CTE occurs equally in both genders. Males, keeping their hair short and probably attributing the shedding to the fatal advance of common baldness, pay less attention to their fall.

Second, the case described emphasizes the invaluable usefulness of MWT, which, though performed at home, provided the quantitative information of the severity of TE that no other tests are able to do, and its relationship with the treatment. Indeed, not only the patient was astoundingly precise in testing his hair shedding every

month, but he provided even the graph, disproving statements that MWT is time-consuming and disagreeable for patients.

Third, this case documents the concept that CTE may be intermittent. This concept is particularly important whenever a biopsy is needed. TE should be active at the moment of the biopsy, a fact which is essential to catch the possible peribulbar inflammation or whatever the cause might be. Because of the typical 3-month lag, in fact, patients may be observed when the noxious agency that produced their TE has already ceased to be active, while hairs keep shedding. Biopsies executed in that moment may provide deceptive information. Knowing that CTE may be intermittent is also important for any future therapeutic trial, intermittency being able to become a confounding factor in the interpretation of the results.

Although the sequence of highs and lows may be merely casual, the present case seems to document also the importance of the emotional strains in causing CTE. Kligman [2] underlined that hair shedding begins after 3 months from the causative stress [3]. This is apparent in our case, especially at the very onset in April after the quarrels of January and March 2104; when shedding peaked in December 2014 after the patient found out that wife was cheating on him; in December 2015 after the legal separation obtained in July, and in July 2016 after his

problems with his new girlfriend in April (Fig. 1). The intervals were not always 3 months long, but the patient was living in a succession of emotional ups and downs, which, by overlapping, prevented him from exactly appreciating the regular sequence of intervals.

Nonetheless, it is important to underline that usually, patients fail to recognize the pathogenetic role of the emotional strain. That is because the time gap between the stress and onset of hair shedding prevents their link from being duly appreciated. Besides, dermatologists should learn from this case that, at the first meeting, the patient may not be willing to report the real causes of his/her stress. Only when sufficient reliance between the patient and doctor has been established, the former might be ready to confide in the doctor.

#### **Statements of Ethics**

The patient's written consent has been obtained.

#### **Disclosure Statement**

The author has no affiliations with nor is he involved in any organization or entity with any financial interest.

#### References

- 1 Whiting DA: Chronic telogen effluvium. Dermatol Clin 1996;14:723–731.
- 2 Kligman AM: Pathologic dynamics of human hair loss. I. Telogen effuvium. Arch Dermatol 1961;83:175–198.
- 3 Hadshiew IM, Foitzik K, Arck PC, Paus R: Burden of hair loss: stress and the underestimated psychosocial impact of telogen effluvium and androgenetic alopecia. J Invest Dermatol 2004;123:455–457.
- 4 Rebora A, et al: Distinguishing androgenetic alopecia from chronic telogen effluvium when associated in the same patient: a simple non-invasive method. Arch Dermatol 2005; 141-1243-1245
- 5 Rebora A: Proposing a simpler classification of telogen effluvium. Skin Appendage Disord 2016;2:35–38.
- 6 Whiting DA: Chronic telogen effluvium: increased scalp hair shedding in middle-aged women. J Am Acad Dermatol 1996;35:899–906