

Videodermoscopy of Trichoteiromania: It is Beyond Broom Hairs

Sir,

Trichoteiromania is a self-inflicted hair disorder that consists of act of rubbing the scalp, which results in fracturing of the hair shafts.^[1] The term trichoteiromania implies rubbing of hairs rather than pulling. In Greek, “teiro” means “I rub.”^[2] It is associated with common dermatoses such as lichen simplex chronicus of the scalp or systemic abnormalities such as Claude Bernard Horner Syndrome.^[3,4] It is a compulsive trichosis that is less recognized and underdiagnosed. Here, we report a rare case trichoteiromania in the skin of color, which was diagnosed with the aid of a videodermoscope.

A 34-year-old male, businessman by occupation presented with patchy hair loss, associated with itching on the scalp for 2 months. The patient denied a history of hair pulling, but he gave a history of frequent rubbing on the affected area to get relieved from severe pruritus. Examination revealed two well-defined lichenified plaques with broken hairs on the vertex of the scalp [Figure 1a]. Systemic examination was unremarkable. Differential diagnoses of trichotillomania, scalp dysesthesia, and trichoteiromania were considered. Trichoscopy was done using FotoFinder videodermoscope (Medicam 1000s, FotoFinder Systems GmbH, Bad Birnbach, Germany) in polarized mode with 20× and 70× magnification. It demonstrated multiple broken hairs, cut at about 5–10 mm from the scalp surface. Under 20×, longitudinal splitting over the entire length of each hair with white specks at the distal end was noted [Figures 1b and 2a]. In 70×, transparency of split hair was found [Figure 2b]. Each hair was divided into 2–5 splits. The skin over the patch revealed white scales and circumferential grayish-brown pigmentation around

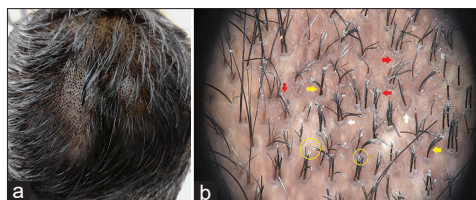


Figure 1: (a) Clinical image of trichoteiromania showing well-defined lichenified plaques with broken hairs on the vertex. (b) Videodermoscopic image of trichoteiromania shows broken hairs (yellow arrows), longitudinal splits (red arrows), and white specks at distal ends (yellow circles). Circumferential grayish-brown pigmentation around the follicles is well appreciated (white arrows). (FotoFinder Systems, Medicam 1000s, 20×, Polarized)

the follicles. Based on these features, a diagnosis of trichoteiromania was made. The patient was prescribed nortriptyline 25 mg daily at night for 4 weeks.

Trichoscopy, the dermoscopy of scalp and hair disease, is a very useful tool in the accurate diagnosis of many hair disorders. It demonstrates shaft abnormalities, changes in follicular and interfollicular structures, and vascular elements.^[5]

In this study, videodermoscopy showed characteristic “broom hairs,” which were short, broken hairs with longitudinal splits over the entire length of the hair. Broken hairs resemble the bristles of a broomstick. Hence, the name “broom hairs.” The grayish-brown pigmentation, patulous follicular ostia, and white scales were also noted. These features were not mentioned in the previous reports on trichoscopy in trichoteiromania. Trichoteiromania is typified by broom hairs without any evidence of surface changes.^[4,6]

Nevertheless, broom hairs were also observed in scalp dysesthesia. Trichoscopy shows circumferential brown pigmentation around the broken hairs, dirty white scales, white areas, vascular elements, and trichorrhexis nodosa in addition to broom

**Balachandra S. Ankad,
S. V. Smitha**

Department of Dermatology, S. Nijalingappa Medical College, Bagalkot, Karnataka, India

Address for correspondence:

Dr. Balachandra S. Ankad,
Department of Dermatology, S. Nijalingappa Medical College,
Near APMC, Navanagar,
Bagalkot, Karnataka - 587 102,
India.

E-mail: drbsankad@gmail.com

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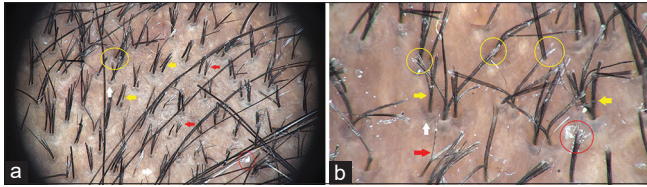


Figure 2: (a) Videodermoscopic image of trichoteiromania shows broken hairs (yellow arrows), longitudinal splits (red arrows), and white specks at distal ends (yellow circle). Note the circumferential grayish-brown pigmentation around the follicles (white arrows) and white scales on the shaft (red circle). (FotoFinder Systems, Medicam 1000s, 20 \times , Polarized). (b) Videodermoscopic image of trichoteiromania shows broken hairs (yellow arrows), longitudinal splits (red arrow), and transparent distal ends (yellow circles). Note the circumferential grayish-brown pigmentation around the follicles (white arrows) and white scales on the shaft (red circle). (FotoFinder Systems, Medicam 1000s, 70 \times , Polarized)

hairs.^[7] In contrast, surface changes such as white areas, vessels, and wavy scales were not noted in the present case. Trichotillomania (TTM) is characterized by decreased hair density and broken hair of different lengths. Flame hair, mace hair, V-hair, burnt-matchstick sign, coiled hairs, and hair powder are specific to TTM.^[6]

Videodermoscopy guided in the differentiation of pruritic patches of hair loss and also made a pitch for the accurate diagnosis of trichoteiromania, which needs correct diagnosis, proper counselling, and treatment. Here, grayish-brown pigmentation and scaling are new observations in the skin of color. These features are attributed to the heavy melanin in the dermoepidermal junction and hyperkeratosis. White specks were due to transparent hair shaft and surface scales. These are the

preliminary findings, further affirmation is warranted. Skin biopsy and follow-up were not possible due to the COVID-19 pandemic.

Thus, videodermoscopy assisted in the accurate diagnosis of trichoteiromania enabling the appropriate management.

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Conflicts of interest

There are no conflicts of interest.

References

1. Pereira JM. Compulsive trichosis. *An Bras Dermatol* 2004;79:609-18.
2. Freyschmidt-Paul P, Hoffmann R, Happle R. Trichoteiromania. *Eur J Dermatol* 2001;11:369-71.
3. João AL, Cunha N, Pessoa E Costa T, Lencastre A. Monotonous broom hairs: A feature of trichoteiromania. *Skin Appendage Disord* 2020; 6:168-170.
4. Diniz TACB, Abuawad YG, Silva FO, Kakizaki P, Valente NYS. Trichoteiromania: An atypical case associated with the Claude Bernard Horner syndrome. *Skin Appendage Disord* 2018; 4:342-4.
5. Rudnicka L, Olszewska M, Rakowska A, Kowalska-Oledzka E, Slowinska M. Trichoscopy: A new method for diagnosing hair loss. *J Drugs Dermatol* 2008;7:651-4.
6. Ankad BS, Mukherjee S, Smitha SV. Trichoscopy in hair disorders in darker skin: An approach to diagnosis. *Clin Dermatol Rev* 2020; 4:102-14.
7. Rakowska A, Olszewska M, Rudnicka L. Trichoscopy of scalp dysesthesia. *Postepy Dermatol Alergol* 2017; 34:245-7.