Supplementary material to article by A. Rakowska et al. "New Trichoscopy Findings in Trichotillomania: Flame Hairs, V-sign, Hook Hairs, Hair Powder, Tulip Hairs"

Table SI. Characteristics of	of trichoscopic features	associated with trichotillomania,	alopecia areata and tinea capitis

Trichoscopic feature	Characteristics		
Broken hairs	Multiple hairs, broken at different lengths present between normally appearing terminal hairs. In contrast to trichotillomania, in alopecia areata hairs are usually fractured at the same level above the scalp.		
Coiled hairs	sponse to a pulling force a hair shafts fractures and the remaining, distal part, may coil. This produces coiled , which are irregular in shape and frequently have features of trichoptilosis.		
Trichoptilosis (split ends)	Split ends are a common finding in patients with long hair, especially in hair weathering. In trichotillomania, trichoptilosis is observed in very short hair (<1 cm).		
Upright re-growing hairs	New, upright re-growing hairs are healthy re-growing hairs. These hairs have a tapered end, continuous hair shaft thickening toward follicular opening and a straight, frequently vertical, position.		
Exclamation mark hairs	Short hairs that are thin and hypopigmented at the proximal end and thicker and darker at the distal end. Trichoscopy allows visualization of exclamation mark hairs shorter than 1–2 mm (micro-exclamation mark hairs). Exclamation mark hairs usually develop when a growing hair shaft is thinned by transiently decreased mitotic activity in a hair follicle. This may be the effect of inflammation, exogenous toxicity, malnutrition, etc. Exclamation-mark hairs may also develop as a result of mechanical force in hair pulling.		
Tapered hairs	Tapered hairs are very long exclamation mark hairs. Technically, hairs that are thin at the proximal end and become normal distally are called tapered hairs when the hair is longer than 1 field of view of a dermoscope (usually $\leq 2$ cm).		
Flame hairs	Hair residues, which are semi-transparent, wavy and cone-shaped, resembling a fire flame.		
Tulip hairs	Short hairs, which tend to be slightly thinner at the base than at the distal end and show a tulip leaf-like hyperpigmentation at the distal end. They are thought to result from diagonal fracturing of hairs.		
v-sign	A v-sign is created, when 2 or more hairs emerging from one follicular unit are pulled simultaneously and break at the same length above scalp surface.		
Amorphous hair residues	Shapeless, partly pigmented structure.		
Hair powder (sprinkled hairs)	Hair shafts may be totally damaged by mechanical manipulation and only a sprinkled "hair powder" is visible. This can be distinguished from "dirty dots" observed in healthy children by its uniform colour, fine pulverization and direct proximity to hair shafts, which show other features of hair damage.		
Black dots	Residues of pigmented hairs, broken or destroyed at scalp level.		
Yellow dots	Empty follicular openings filled with keratotic material and/or sebum. Yellow dots usually are lacking hair shafts, but may occasionally contain dystrophic or vellus hairs.		
Yellow dots with black peppering	Yellow dots with residues of pigmented hair shafts inside.		
Hook hairs	Variant of coiled hairs- partial coiling of the distal part of fractured hairs results in a hook-like appearance.		
Pigtail hairs	Short re-growing hairs, which form regular, circular or oval, twisted structures with tapered ends that resemble pig tails. They differ from coiled hairs by their regular structure and pointed end.		
Block hairs	Very short hairs with a horizontal distal end.		
i-hairs	i-hairs are block hairs with an accented dark distal end.		
Vellus hairs	Hairs which are less than 30 $\mu$ m in thickness and <2–3 mm in length, hypopigmented and non-medullated.		
Comma hairs	C-shaped hairs, characterized by uniform thickness and homogeneous pigmentation of the hair shaft and a sharp diagonal end. Comma hairs are considered a marker of tinea capitis.		
Corkscrew hairs	Short hairs curling into corkscrew-like structures. A marker of tinea capitis, most common in patients with dark skin phototypes.		
Zigzag hairs	Hairs which are repeatedly sharply angled and form zig-zag, or Z-like structures. They are observed in tinea capitis, alopecia areata, trichorrhexis nodosa, and other diseases that cause focal weakening of the hair shaft.		

Supplementary material to article by A. Rakowska et al. "New Trichoscopy Findings in Trichotillomania: Flame Hairs, V-sign, Hook Hairs, Hair Powder, Tulip Hairs"

	TTM n (%)	AA n (%)	TC n (%)	Statistical significance		
				TTM vs. AA	TTM vs. TC	AA vs. TC
Broken hairs	44/44 (100)	212/314 (67)	10/12 (83)	p<0.001	Not significant	Not significant
Coiled hairs	17/44 (39)	2/314 (0.6)	0	p<0.001	/	/
Short hairs with trichoptilosis ("split ends")	15/44 (34)	5/314 (2)	0	p < 0.001	/	/
Upright re-growing hairs (<3 mm)	11/44 (25)	33/314 (10)	2/12 (16)	p < 0.001	Not significant	Not significant
Micro-exclamation mark hairs	6/44 (14)	223/314 (71)	0	p < 0.001	/	/
Tapered hairs	7/44 (16)	254/314 (81)	0	p < 0.001	/	/
Flame hairs	11/44 (25%)	0	0	a	/	/
Tulip hairs	21/44 (48%)	34/314 (10%)	0	p < 0.001	/	/
v-sign	25/44 (57)	2/314 (0.6)	0	p < 0.001	/	/
Amorphous hair residues	5/44 (11)	36/314 (11)	3/12 (25)	Not significant	Not significant	Not significant
Hair powder (sprinkled hairs)	7/44 (16)	0	0	a	/	/
Black dots	12/44 (27)	167/314 (53)	3/12 (25)	p < 0.001	Not significant	p < 0.05
Yellow dots	3/44 (7)	207/314 (66)	0	p < 0.001	/	/
Yellow dots with black peppering	3/44 (7)	4/314 (1)	0	Not significant	/	/
Hook hairs	25/44 (57)	0	0	a	/	/
Re-growing pigtail hairs (circular or oval)	0	89/314 (28)	0	/	b	/
Block hairs	2/44 (5)	0	6/12 (50)	/	<i>p</i> <0.005	/
i-hairs	1/44 (2)	0	4/12 (33)	/	p < 0.05	/
Hypopigmented vellus hairs	0	167/314 (53)	0	/	b	/
Comma hairs	0	0	7/12 (58)	/	/	с
Corkscrew hairs	0	0	2/12 (17)	/	/	с
Zigzag hairs	0	5/314 (2)	3/12 (25)	/	/	Not significant
No hairs in field of view	0	58/314 (18)	0	/	b	/

Table SII. Trichoscopy features of trichotillomania (TTM), alopecia areata (AA) and tinea capitis (TC)

<sup>a</sup>Only in trichotillomania. <sup>b</sup>Only in alopecia areata. <sup>c</sup>Only in tinea capitis.

Supplementary material to article by A. Rakowska et al. "New Trichoscopy Findings in Trichotillomania: Flame Hairs, V-sign, Hook Hairs, Hair Powder, Tulip Hairs"

Table SIII. Key trichoscopy features distinguishing trichotillomania from alopecia areata

Trichotillomania	Alopecia areata	Both diseases	
<ul> <li>Hairs broken at different lengths</li> <li>Coiled hairs</li> <li>Hook hairs</li> <li>Short hairs with split ends (trichoptilosis)</li> <li>Flame hairs</li> <li>Tulip hairs</li> </ul>	<ul> <li>Yellow dots</li> <li>Lack of hairs in a field of view</li> <li>Vellus hairs</li> <li>Re-growing pigtail hairs</li> <li>Similar length of broken hairs in a field of view</li> </ul>	<ul><li>Black dots</li><li>Exclamation mark hairs</li><li>Broken hairs</li></ul>	

v-signHair powder