



Quiz

Quiz on Trichology

S Dinesh Kumar¹, J Iswariya¹, Debdeep Mitra¹

¹Department of Dermatology, Venereology and Leprosy, Command Hospital Air Force, Bengaluru, Karnataka, India.

*Corresponding author:

S Dinesh Kumar,
Department of Dermatology,
Venereology and Leprosy,
Command Hospital Air Force,
Bengaluru, Karnataka, India.

dheenumbbs@gmail.com

Received: 27 July 2024
Accepted: 03 November 2024
Epub Ahead of Print: 06 December 2024
Published: 07 February 2025

DOI
[10.25259/IJPGD_167_2024](https://doi.org/10.25259/IJPGD_167_2024)

Quick Response Code:



QUESTIONS

1. A 12-year-old male child presented with multiple papular lesions over the body for 2 years. His mother gave history that he was born with normal hair which shed 2 months later and never regrown thereafter. Histopathology reveals multiple dermal cysts.^[1] What is your probable diagnosis?
2. A 5-year-old child presented with yellowish cup-shaped crusts having a mousy odour over the scalp for 2 weeks. Clinical diagnosis of tinea capitis was made. What is the characteristic microscopic appearance of the hyphae and the organism causing it?^[2]
3. A 50-year-old female presented with a papule with tuft of hair on the face for 6 months. Histopathology reveals a central dilated large follicle surrounded by multiple small follicles (Mamma and baby hairs), enveloped in an eosinophilic fibrous stroma.^[3] Identify the condition.
4. A 22-year-old male presented with patchy hair loss over the scalp for 3 months. Trichoscopy revealed irregularly arranged dilated follicular orifices without any features of alopecia areata, described as 'Eastern pan cake sign'.^[4] What is your likely diagnosis?
5. A 43-year-old female presented with scarring alopecia over the frontal region of the scalp. UV-enhanced trichoscopy reveals fluorescence due to presence of follicular propionibacterium which indicates preservation of follicular unit viability and hence, better prognosis.^[5] What is the named sign and condition discussed here?
6. A 40-year-old male with androgenetic alopecia has been planned for follicular unit extraction. Fox test has been performed as a pre-procedure to assess the transection rates. Which grades of fox test have high transection rates?^[6]
7. A 40-year-old African woman presented with flesh-coloured, scarring alopecia over the vertex of scalp for 6 months with uterine leiomyomas. Histopathology showed perifollicular concentric fibrosis, premature desquamation of inner root sheath and eccentric thinning of follicular epithelium.^[7] What is your diagnosis?
8. What does the term 'Trichodaganomania' mean?^[8]
9. A 9-year-old girl was sent home from school because she had 'lice' on her head. On closer inspection, it is evident that the hair contains components that slide freely along the hair shaft.^[9] What is your most likely diagnosis?
10. Which gene is most likely mutated in a 10-year-old child with woolly hair, diffuse palmoplantar keratoderma and right ventricular arrhythmogenic cardiomyopathy?^[10]
11. What laboratory abnormality is commonly associated with familial alopecia areata?^[11]
12. A 8-year-old boy presented with atopy, ichthyosis linearis circumflexa and anaphylaxis from food allergy. SPINK 5 gene mutation has been found.^[12] What is the characteristic hair abnormality in this patient?

This is an open-access article distributed under the terms of the Creative Commons Attribution-Non Commercial-Share Alike 4.0 License, which allows others to remix, transform, and build upon the work non-commercially, as long as the author is credited and the new creations are licensed under the identical terms.

©2025 Published by Scientific Scholar on behalf of Indian Journal of Postgraduate Dermatology

13. A 35-year-old male is diagnosed to have androgenetic alopecia and started on tablet dutasteride. What is your advise on blood donation after stopping the drug?^[13]
14. In trichotillomania, there is sparing of hair at periphery due to a lower pain threshold. This pattern of hair loss resembles the haircut of a mythical character in Robbin Hood.^[14] Name the sign which describes it.
15. A 7-year-old male child presents with sparse hair, pear-shaped nose and cone-shaped phalynx. There was a mutation in trichorhinophalangeal syndrome gene.^[15] What is your diagnosis?
16. Describe the hair finding in electron microscopy in a patient diagnosed with hypohidrotic ectodermal dysplasia.^[16]
17. A 15-year-old girl has been worried about the cosmetic appearance of red hair. What is the genetic abnormality that results in red hair?^[17]
18. A 11-year-old child presented with sparse hair, cleft palate, PPK and ankyloblepharon.^[18] Which syndrome is associated with these features?
19. A 25-year-old adult male is diagnosed with pseudofolliculitis barbae and trichoscopy reveals curved hair attached to skin on either sides.^[19] Name this trichoscopic sign.
20. A 13-year-old boy presented with slow-growing hair and patchy alopecia. He also had short, sparse and light-coloured hair. Trichogram showed more than 70% of anagen hairs. Electron microscopy revealed ruffled cuticle.^[20] Identify the condition.

ANSWERS

1. Atrichia with papular lesions
2. Favic chandeliers (Knobby antler-like hyphae) seen in *Trichophyton schoenleinii*
3. Trichofolliculoma
4. Alopecic and aseptic nodules of scalp
5. Starry night sky sign seen in frontal fibrosing alopecia
6. Grades 4 and 5
7. Central centrifugal cicatricial alopecia
8. Compulsive hair biting
9. Hair casts
10. Plakoglobin (occurs in Naxos disease)
11. Thrombocytopenia
12. Trichorrhexis invaginata. The condition described here is Netherton syndrome
13. Avoid blood donation for 6 months.
14. Friar tuck sign
15. Trichorhinophalangeal syndrome
16. Longitudinal groove
17. Melanocortin 1 receptor
18. Hay-wells syndrome
19. Handlebar sign
20. Loose anagen hair syndrome

Ethical approval: Institutional Review Board approval is not required.

Declaration of patient consent: Patient's consent not required as there are no patients in this study.

Financial support and sponsorship: Nil.

Conflicts of interest: There are no conflicts of interest.

Use of artificial intelligence (AI)-assisted technology for manuscript preparation: The authors confirm that there was no use of artificial intelligence (AI)-assisted technology for assisting in the writing or editing of the manuscript and no images were manipulated using AI.

REFERENCES

1. Boisen J, Lewis J, Hendrick SJ. Atrichia with Papular Lesions Confirmed Via Genetic Testing: A Case Report. *Cureus* 2022;14:e32562.
2. Ghadgepatil SS, Sharma YK, Misra R, Dash KN, Patvekar MA, Deo KS. An Unusual Case of Tinea Capitis Caused by *Trichophyton schoenleinii* in an Elderly Female. *Indian Dermatol Online J* 2016;2015:49-50.
3. Massara B, Sellami K, Graja S, Boudaouara O, Miladi S, Hammami F, et al. Trichofolliculoma: A Case Series. *J Clin Aesthet Dermatol* 2023;16:41-3.
4. Lázaro-Simó AI, Sancho MI, Quintana-Codina M, Viladomiu ED, Millet PU, Redonnet MS. Alopecic and Aseptic Nodules of the Scalp with Trichoscopic and Ultrasonographic Findings. *Indian J Dermatol* 2017;62:515-8.
5. Rodrigues-Barata AR, Moreno-Arrones OM, Corralo DS, Galvan SV. The "Starry Night Sky Sign" Using Ultraviolet-light-enhanced Trichoscopy: A New Sign that May Predict Efficacy of Treatment in Frontal Fibrosing Alopecia. *Int J Trichol* 2018;10:241-3.
6. Dua A, Dua K. Follicular Unit Extraction Hair Transplant. *J Cutan Aesthet Surg* 2010;3:76-81.
7. Blattner C, Polley DC, Ferritto F, Elston DM. Central Centrifugal Cicatricial Alopecia. *Indian Dermatol Online J* 2013;4:50-1.
8. Jafferany M, Feng J, Hornung RL. Trichodaganomania: The Compulsive Habit of Biting One's Own Hair. *J Am Acad Dermatol* 2009;60:689-91.
9. Keipert JA. Hair Casts. Review and Suggestion Regarding Nomenclature. *Arch Dermatol* 1986;122:927-30.
10. Protonotarios N, Tsatsopoulou A. Naxos Disease: Cardiocutaneous Syndrome Due to Cell Adhesion Defect. *Orphanet J Rare Dis* 2006;1:4.
11. Ahmed AM, Barahmani N, Duvic M. National Alopecia Areata Registry. Familial Alopecia Areata and Chronic Thrombocytopenia. *J Am Acad Dermatol* 2008;58 5 Suppl 1:S75-7.
12. Bittencourt MJ, Moure ER, Pies OT, Mendes AD, Deprá MM, De Mello AL. Trichoscopy as a Diagnostic tool in Trichorrhexis Invaginata and Netherton Syndrome. *An Bras Dermatol* 2015;90:114-6.
13. Wolverson SE, Wu JJ. *Comprehensive Dermatologic Drug therapy*. 4th ed., Ch. 34. Netherlands: Elsevier Health Sciences; 2019.
14. Peralta L, Morais P. Photoletter to the Editor: The Friar Tuck

- Sign in Trichotillomania. *J Dermatol Case Rep* 2012;6:63-4.
15. Tüysüz B, Güneş N, Alkaya DU. Trichorhinophalangeal syndrome In: Adam MP, Feldman J, Mirzaa GM, Pagon RA, Wallace SE, Amemiya A, *et al*, editors. *GeneReviews*®. Seattle, WA: University of Washington, Seattle; 1993-2024. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK425926> [Last accessed on 2024 Mar 21].
 16. Stecksén-Blicks C, Falk Kieri C, Hägg D, Schmitt-Egenolf M. Hair Shaft Structures in EDAR Induced Ectodermal Dysplasia. *BMC Med Genet* 2015;16:79.
 17. Schaffer JV, Bolognia JL. The Melanocortin-1 Receptor: Red Hair and Beyond. *Arch Dermatol* 2001;137:1477-85.
 18. McGrath JA, Duijf PH, Doetsch V, Irvine AD, De Waal R, Vanmolkot KR, *et al*. Hay-Wells Syndrome is Caused by Heterozygous Missense Mutations in the SAM Domain of p63. *Hum Mol Genet* 2001;10:221-9.
 19. Kaliyadan F, Kuruvilla J, Al Ojail HY, Quadri SA. Clinical and Dermoscopic Study of Pseudofolliculitis of the Beard Area. *Int J Trichology* 2016;8:40-2.
 20. Srinivas SM. Loose Anagen Hair Syndrome. *Int J Trichology* 2015;7:138-9.

How to cite this article: Dinesh Kumar S, Iswariya J, Mitra D. Quiz on Trichology. *Indian J Postgrad Dermatol.* 2025;3:110-2. doi: 10.25259/IJPGD_167_2024