National Board of Examinations - Journal of Medical Sciences
Volume 3, Issue 9, Pages 1157–1161, September 2025
DOI 10.61770/NBEJMS.2025.v03.i09.013

CASE REPORT

Syphilitic Alopecia Through the Dermoscope: A Series of two Cases

Neerja Saraswat,[1] Shekhar Neema,[2] Durga Madhab Tripathy,[1] Eeshaan Ranjan[3,*] and Sushil Kumar[4]

[1]*Department of Dermatology, Military Hospital, Agra, India*
[2]*Department of Dermatology, Base Hospital, Lucknow, India*
[3]*Department of Dermatology, Base Hospital, Delhi Cantt, India*
[4]*Department of Dermatology, Motilal Nehru Medical College, Allahabad, India*

Accepted: 1-July-2025 / Published Online: 9-September-2025

Abstract

Syphilitic alopecia (SA) is an uncommon manifestation of secondary syphilis which mimics common non-cicatricial alopecias. Dermoscopy/trichoscopy has been increasingly used as a non-invasive tool for the diagnosis of hair disorders. In some cases, specific dermoscopic features instantaneously clinch the diagnosis while in most other cases including syphilitic alopecia the findings are supportive. We report two cases of syphilitic alopecia with characteristic dermoscopic findings. Dermoscopy of both the patients showed alopecic patches with empty hair follicles, vellus hairs, hypopigmented to depigmented hairs and telangiectasias in a diffuse erythematous background. The absence of exclamation mark hairs as seen in alopecia areata, cork-screw hairs in tinea capitis, and lack of trichoptilosis, flame hairs and tulip hairs in trichotillomania makes the diagnosis of SA more likely. The case series highlights some valuable dermoscopic features of SA, a sparsely researched entity. Since syphilis, the great mimicker, has resurged, SA is gradually turning into a major mimicker in dermoscopy as well. Meticulous use of this non-invasive tool will help efface common hair disorders that simulate SA for prompt diagnosis and favourable therapeutic outcomes.

Keywords: Syphilitic alopecia, Non-cicatricial alopecia, Dermoscopy, Trichoscopy

*Corresponding Author: Eeshaan Ranjan
Email: eeshaan.ranjan@gmail.com

Introduction

Syphilitic alopecia (SA) is an uncommon manifestation of secondary syphilis which mimics common non-cicatricial alopecias. Most cases are asymptomatic, and the absence of specific histopathological findings results in under-diagnosis of the entity. Dermoscopy/trichoscopy has been increasingly used as a non-invasive tool for the diagnosis of hair disorders. In some cases, specific dermoscopic features instantaneously clinch the diagnosis while in most other cases including syphilitic alopecia the findings are supportive. There has been a resurgence of syphilis in the past two decades and in tandem with that, trichoscopic findings are studied and utilized to diagnose syphilitic alopecia. [1,2] Herein we report two cases of syphilitic alopecia with characteristic dermoscopic findings.

Case 1

A 28-year-old man presented with a five-month history of patchy alopecia over the parieto-occipital scalp (Figure 1A) along with mildly erythematous and scaly patches over the palms and soles. Dermoscopy of the alopecic patches revealed empty hair follicles, vellus hairs, hypopigmented to depigmented hairs and telangiectasias in a diffuse erythematous background (Figure 1). A biopsy from the palmoplantar lesion revealed parakeratosis, lichenoid infiltrate along with plasma cells and endothelial cell swelling of the dermal blood vessels. Additionally, the Venereal diseases research laboratory (VDRL) test was positive with titers of 1:128 and *Treponema pallidum* haem-agglutination (TPHA) was also positive. The patient was treated for secondary syphilis with benzathine penicillin, which was followed by complete hair regrowth in three months and resolution of palmoplantar lesions.

Case 2

A 36-year-old man visited the dermatology clinic for a maculopapular rash over the trunk of two months duration. On examination, subtle patches of non-cicatricial alopecia were incidentally observed. (Figure 1B) On further probing, the patient gave a history of a painless genital ulcer four months back that healed on its own without any sequelae. Dermoscopy of these patches revealed empty hair follicles, depigmented hairs, and telangiectasias. A VDRL was positive with titers of 1:256 and TPHA was positive. The patient was managed as secondary syphilis with syphilitic alopecia with a single shot of benzathine penicillin resulting in complete resolution.

Syphilitic alopecia (SA) is an uncommon manifestation of secondary syphilis with a prevalence ranging from 2.9-7%. In 1940, McCarthy described two forms of SA; symptomatic and essential, the former being associated with other cutaneous lesions of syphilis. Moth-eaten or patchy non-cicatricial alopecia is the commonest presentation, whilst diffuse and mixed patterns can occur too. The pathophysiology of SA is still enigmatic, but immune-mediated reaction to Treponema pallidum antigens centred around hair follicles is the best-proposed hypothesis. Alopecia areata, tinea capitis, and trichotillomania feature as the main differentials for moth-eaten alopecia, while telogen effluvium mimics diffuse SA [1].

Although there is no telltale dermoscopic feature of SA but ruling out differentials by confirming the absence of specific signs is the main aim while performing trichoscopy in this entity. The

absence of exclamation mark hairs in alopecia areata, cork-screw hairs in tinea capitis, and lack of trichoptilosis, flame hairs and tulip hairs in trichotillomania makes the diagnosis of SA more likely. Decreased hair follicles per unit, short regrowing hairs, empty follicles, peripheral black dots, follicular scaling, and hypopigmented hairs are some dermoscopic findings of SA described by Piraccini et al. Pomsoong et al in a study describing dermoscopy in SA pointed out that background uniform erythema is a key finding along with the previously described features to assuredly rule in SA, which was prominent in the first case [2,3]. The case series highlights some valuable dermoscopic features of SA, a sparsely researched entity. Syphilis, the great mimicker, has resurged, so SA is slowly becoming a great mimicker in dermoscopy too. Meticulous use of this non-invasive tool will help efface common hair disorders that simulate SA for prompt diagnosis and favourable therapeutic outcomes.

Figure 1A

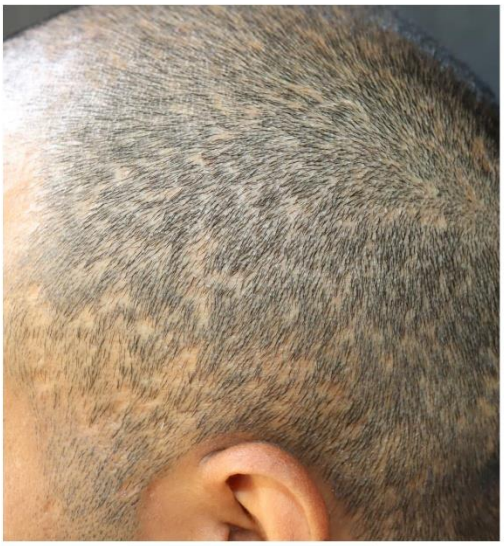

Figure 1B

Figure 1. **A** Multiple ill-defined patches of non-cicatricial alopecia over the occipital scalp; **B**: Multiple ill-defined patches of non-cicatricial alopecia over the temporal and parietal scalp

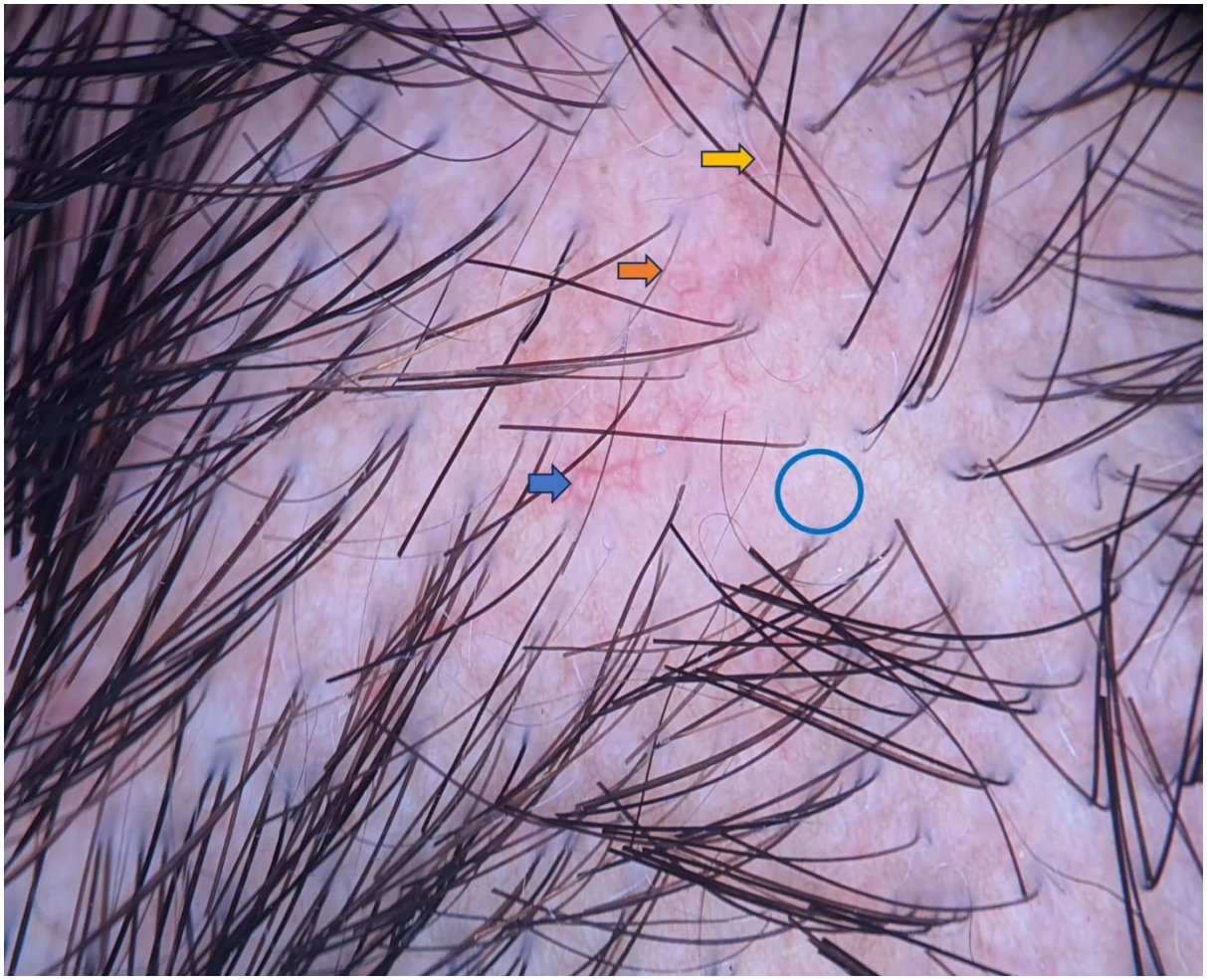

Figure 2: Dermoscopy (Dermlite DL4, polarized, 10 X) of the alopecic patches shows empty hair follicles (blue circle), vellus hairs (orange arrow), depigmented hairs (yellow arrow), and telengiectasia (blue arrow).

Acknowledgement

The patient in the manuscript has given written informed consent to the publication of case details and photographs.

Data availability statement

The authors declare that data supporting the findings of this case are available within the article and its supplementary information file.

Author contribution statement

The manuscript has been read and approved by all the authors. The requirements for authorship have been met, and each author believes that the manuscript represents honest work. In addition, we declare that the manuscript is original and it is not being published or submitted for publication elsewhere

Conflicts of interest

The authors declare that they do not have conflict of interest.

Funding

No funding was received for conducting this study.

References

1. Bomfim ICC, Ianhez M, Miot HA. Dermatoscopic findings of syphilitic alopecia. An Bras Dermatol. 2020 Jul-Aug;95(4):518-520.
2. Pomsoong C, Sukanjanapong S, Ratanapokasatit Y, Suchonwanit P. Epidemiological, Clinical, and Trichoscopic Features of Syphilitic Alopecia: A Retrospective Analysis and Systematic Review. Front Med (Lausanne). 2022 May 2;9:890206.
3. Doche I, Hordinsky MK, Valente NYS, Romiti R, Tosti A. Syphilitic Alopecia: Case Reports and Trichoscopic Findings. Skin Appendage Disord. 2017 Oct;3(4):222-224.