7-2023

Photodistributed Lichenoid Eruption with Alopecia: A Unique Presentation of Graham–Little–Piccardi–Lasseur Syndrome

Austin Ambur

Aashni Bhukhan

Charles Dunn

Rajiv Nathoo

Case Report

Access this article online
Website: www.ijtrichology.com
DOI: 10.4103/ijt.ijt_47_22
Quick Response Code:

Photodistributed Lichenoid Eruption with Alopecia: A Unique Presentation of Graham–Little–Piccardi–Lasseur Syndrome

Austin Ambur, Aashni Bhukhan, Charles Dunn, Rajiv Nathoo

Department of Dermatology, Kansas City University, Kansas, Florida, USA

Address for correspondence:
Dr. Austin Ambur, Do, Kansas City University, 1410 W Broadway St Ste 205, Oviedo, Florida 32765, USA.
E-mail: austin.b.ambur@gmail.com

Submitted: 27-Apr-2022
Revised: 07-Sep-2022
Accepted: 28-Dec-2022
Published: 05-Apr-2024

ABSTRACT

Graham–Little–Piccardi–Lasseur syndrome (GLPLS) is characterized by diffuse alopecia and a lichenoid follicular eruption affecting the scalp, eyebrows, and intertriginous regions. It is considered a variant of lichen planopilaris. The condition often begins as hyperkeratotic papules on the trunk and extremities followed by the development of alopecia. Several subtypes of lichen planus have been associated with a photodistriubuted eruption including lichenoid drug reactions, actinic lichen planus, and lichen planus pigmentosus; however, there are no reported cases associated with GLPLS. We herein report the first case of GLPLS displaying a photodistributed lichenoid eruption to expand upon the differential diagnosis of photoaggravated conditions. We also use this case to review the pathophysiology and therapeutic modalities to manage GLPLS.

Key words: Alopecia, Graham–Little–Piccardi–Lasseur syndrome, lichenoid eruption, photoaggravated dermatoses

INTRODUCTION

Graham–Little–Piccardi–Lasseur syndrome (GLPLS) is a variant of lichen planopilaris (LPP) characterized by the triad of nonscarring alopecia of pubic and axillary hairs, scarring alopecia of the scalp, and a disseminated lichenoid follicular eruption on the trunk, limbs, face, or eyebrows. The condition often begins as hyperkeratotic papules on the trunk and extremities followed by the development of alopecia. The pathophysiology has not been fully elucidated; however, the leading theory is via an autoimmune T-cell mediated mechanism. Several variants of lichen planus have been associated with a photodistiubuted eruption including lichenoid drug reactions, actinic lichen planus, and lichen planus pigmentosus. We herein report the first case of GLPLS displaying a photodistributed lichenoid eruption.

CASE REPORT

A 74-year-old Caucasian female presented with a progressive hair loss and a diffuse cutaneous eruption for 1 year. The rash initially began on the upper chest with progression to the arms followed by diffuse hair loss. Cutaneous examination was remarkable for widespread erythematous follicular-based papules in a phototdistributed pattern involving the face, upper chest, bilateral dorsal arms, and hands [Figure 1a-d]. She was also noted to have diffuse loss of hair involving the scalp, eyebrows, axilla, and pubic region [Figure 2a and b]. Trichoscopy demonstrated diffuse perifollicular erythema of the scalp. Consideration was given for lichenoid drug eruption and autoimmune connective tissue diseases given the striking photodistributed configuration of the rash. Hematoxylin and eosin staining (H and E) demonstrated lichenoid dermatitis [Figure 3]. Laboratory evaluation

How to cite this article: Ambur A, Bhukhan A, Dunn C, Nathoo R. Photodistributed lichenoid eruption with alopecia: A Unique presentation of Graham–Little–Piccardi–Lasseur syndrome. Int J Trichol 2023;15:154-6.

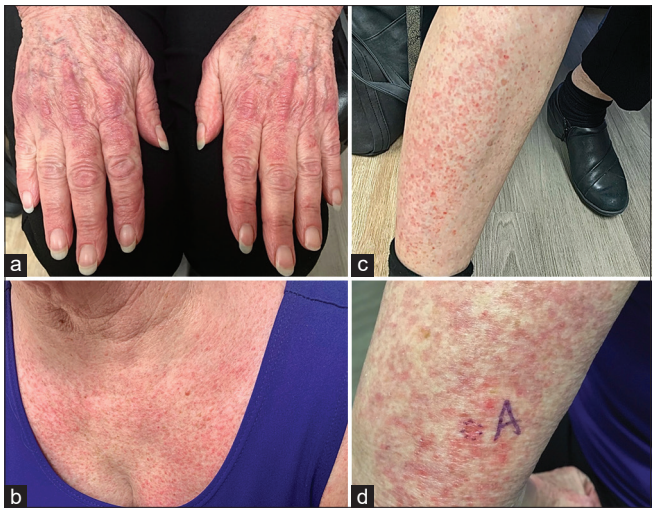

Figure 1: Erythematous follicular-based papules in a phototdistributed pattern involving the bilateral hands (a), upper chest (b), anterior legs (c), and dorsal arms (d)

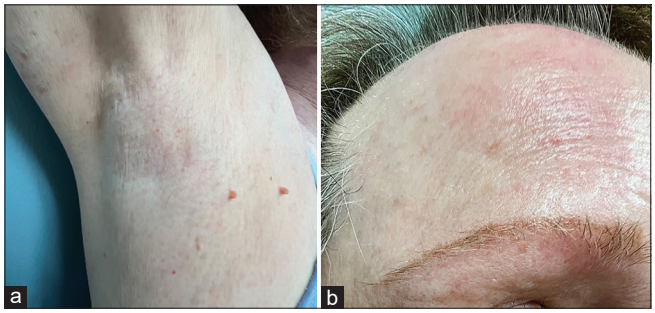

Figure 2: Diffuse loss of hair involving the axilla (a), scalp, and eyebrows (b)

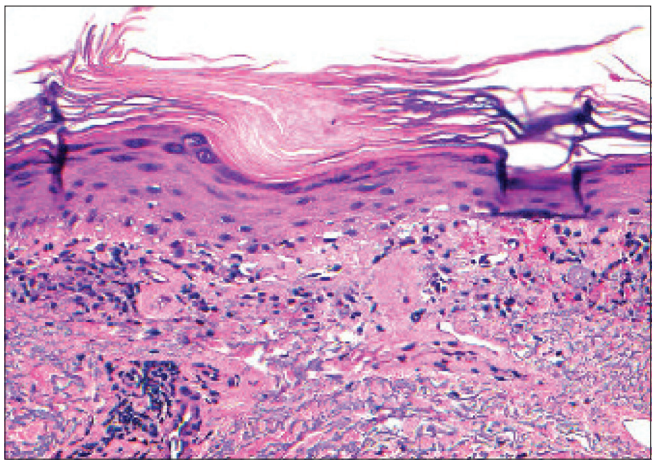

Figure 3: The epidermis showing scattered foci of hydropic change and colloid bodies. The horn is thickened with orthokeratotic and parakeratotic foci. The superficial dermis contains a band-like mixed infiltrate (H and E × 20)

was unremarkable, including a negative SS-A, antinuclear antibody, anti-SM, hepatitis panel, iron panel, testosterone panel, vitamin D, and thyroid function. Medication reconciliation was unremarkable for any drug associations. The clinicopathological findings were most consistent with GLPLS. The patient was initiated on hydroxychloroquine 200 mg BID, clobetasol 0.05% topical cream BID, and hydrocortisone 2.5% cream BID.

DISCUSSION

Graham–Little–Piccardi–Lassueur syndrome (GLPLS) is a rare variant of LPP that retrieved its name from a case first described by Piccardi in 1913, followed by Graham–Little in 1915 on a case of a woman named Lassueur.[1] Thereafter, approximately 50 cases have been reported in the literature, predominantly occurring in females between 40 and 60 years of age.[2,3] GLPLS is four times more common in females, and only a few cases have been reported in males.[3] LPP can be categorized into three variants: classical LPP, frontal fibrosing alopecia, and GLPLS.[3] Although the exact etiology is unknown, GLPLS is considered to be lymphocyte mediated.[4]

The striking photodistribution may be explained by GLPLS being a photoaggravated dermatosis in which the underlying disease is not caused, but rather exacerbated, by sun exposure, similar to other lichenoid eruptions. Diagnosis of GLPLS requires both clinical and histopathological findings. GLPLS classically presents with a triad of patchy cicatricial alopecia of the scalp, noncicatricial alopecia of the axilla and groin, and multiple follicular spinous papules on the body, scalp, or both.[5] Histopathology typically demonstrates a predominantly lymphocytic peri-infundibular infiltrate, associated with perifollicular fibrosis, vacuolar alteration, and necrotic keratinocytes.[6] Treatment of GLPLS is challenging and primarily focuses on reducing immunological response, providing symptomatic relief, and preventing progression of follicular scarring. Topical, intralesional, and systemic glucocorticoids have shown to provide some relief.[7] Further, immunosuppressive agents such as cyclosporine, hydroxychloroquine, topical tacrolimus and most recently, JAK inhibitors such as tofacitinib, have been utilized to reduce inflammation.[6,8]

IRB approval status

IRB approval not required by Kansas City University for publication of this manuscript.

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal.

The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

Financial support and sponsorship

Nil.

Conflicts of interest

There are no conflicts of interest.

REFERENCES

1. Little EG. Folliculitis decalvans et atrophicans. Proc R Soc Med 1915;8:139-41.
2. Alkhayal FA, Alsudairy F, Al Mubarak L, Almohanna HM. Graham-Little piccardi lassueur syndrome and review of the literature. Clin Case Rep 2021;9:e04761.
3. Assouly P, Reygagne P. Lichen planopilaris: Update on diagnosis and treatment. Semin Cutan Med Surg 2009;28:3-10.
4. Daoud MS, Pittelkow MR. Lichen planus. In: Wolff K, Goldsmith LA, Katz SI, Gilchrest BA, Paller AS, Leffell DJ, editors. Fitzpatrick's Dermatology in General Medicine. 7th ed. New York: Mc Graw Hill; 2008. p. 463-77.
5. Pai VV, Kikkeri NN, Sori T, Dinesh U. Graham-little piccardi lassueur syndrome: An unusual variant of follicular lichen planus. Int J Trichology 2011;3:28-30.
6. Vashi N, Newlove T, Chu J, Patel R, Stein J. Graham-Little-Piccardi-Lassueur syndrome. Dermatol Online J 2011;17:30.
7. Odom RB, James WD, Berger TG, editors. Andrews' Diseases of the Skin. 9th ed. Philadelphia: WB Saunders Company; Lichen Planus and Related Conditions; 2000. p. 274-5.
8. Yang CC, Khanna T, Sallee B, Christiano AM, Bordone LA. Tofacitinib for the treatment of lichen planopilaris: A case series. Dermatol Ther 2018;31:e12656.