Lichen Planopilaris Mimicking Androgenic Alopecia: The Importance of Using a Dermatoscope

Jennifer Krejci, MD | *San Antonio, Texas, USA* | jkrejci@limmerhtc.com; Moses Alfaro, MSI | *San Antonio, Texas, USA*

ABSTRACT

Scarring alopecia (cicatricial alopecia) affects 7% of patients at hair loss specialty clinics. Clinical findings can be subtle and easily overlooked without a thorough physical examination of the scalp. Scarring alopecia can mimic pattern alopecia or coexist and contribute to thinning, so a high index of suspicion and utilization of a dermatoscope is critical to making the diagnosis. Hair restoration surgeons must be aware of the presentation and perform a thorough physical examination in order to avoid the costly mistake of performing surgery in patients who are potentially doomed to fail.

Keywords: cicatricial alopecia, dermatoscope, scarring alopecia

This article is open access and may not be copied, distributed, or modified without written permission from the International Society of Hair Restoration Surgery.

INTRODUCTION

Scarring alopecia (cicatricial alopecia) affects 7% of patients seen at hair loss specialty clinics,[1] so it's imperative that all hair restoration surgeons be aware of the presentation in order to avoid surgery in patients who are potentially doomed to fail. Clinical findings can be subtle and easily overlooked without a thorough physical examination of the scalp. It's not unusual for patients with scarring alopecia to also have male/female pattern hair loss coexisting and contributing to the thinning. In addition, scarring alopecia by itself can mimic other types of hair loss so a high index of suspicion and utilization of a dermatoscope is critical to making the diagnosis.

The most common type of scarring alopecia is lichen planopilaris (LPP) or its counterpart, frontal fibrosing alopecia (FFA). On exam, there is perifollicular (peripilar) erythema, hyperkeratosis, and loss of follicular ostia (permanent scarring) that is scattered in the scalp (LPP) or localized to the frontal hairline (FFA).[1] When LPP is less inflammatory, the classic findings can be subtle and best viewed with a dermatoscope. In contrast, pattern hair loss lacks inflammation and can be identified by the hallmark of miniaturized follicles mixed with terminal hairs within the typical Norwood/Ludwig scales.

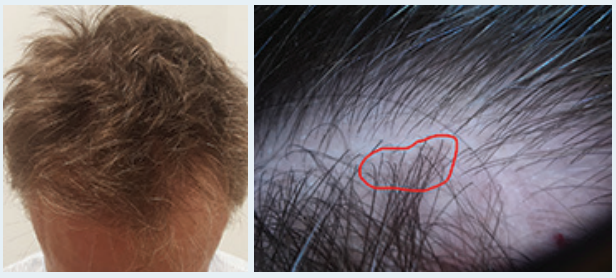
We present two cases of LPP that had been previously treated by other practitioners and arrived at our clinic for hair transplant (HT) consultation with presumed pattern hair loss. Here, we highlight the importance of scalp examination using a dermatoscope to accurately identify the hair loss conditions in order to avoid catastrophic mistakes and guide appropriate treatment.

CASE REPORT #1

A 51-year-old male presented for hair transplant evaluation with a 10+ year history of hair loss. He complained of increased shedding in the past few years that he attributed to a stressful divorce process associated with a 50lb weight loss. He reported a family history of pattern hair loss on both sides. He used topical minoxidil 5% solution 7 years ago but stopped after 2 years due to lack of perceived efficacy. He then underwent multiple sessions of platelet-rich fibrin from a nurse practitioner at a local medispa, which he believed helped, and he has continued to take oral finasteride 2mg for the last 8 years as prescribed by his family physician.

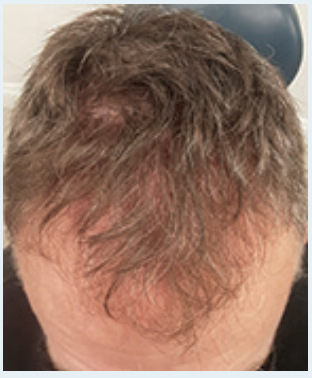
On examination, he appeared to be a typical Norwood pattern 3A with otherwise good density hair (Figure 1, left). However, on dermoscopy, perifollicular scaling, mild erythema, with loss of follicular ostia in the frontal zone (Figure 1, right) was noted. Punch biopsy confirmed perifollicular lymphocytic inflammation at the infundibulum, perifollicular fibrosis, retained sebaceous glands except in areas of fibrosis, and overall decreased follicular density confirming LPP in the setting of male pattern hair loss.

FIGURE 1. Initial visit photo shows Norwood pattern 3A (*left*) and dermoscopy shows mild perifollicular erythema and scant scale (*right*).



The patient was started on doxycycline 100mg and fluocinonide solution once per day but he reported continued shedding with pruritus of the affected scalp areas. On exam, the frontal zone did appear thinner than 2 months prior (Figure 2) and dermoscopy revealed persistent perifollicular erythema and scaling in the frontal area. Intralesional kenalog (ILK) 3mg/ml was initiated monthly for the first 3 months while the patient continued doxycycline, fluocinonide, and finasteride daily. To date, we continue to follow his progress every 3 months with continued ILK, and he has had improvement of his symptoms. On the most recent visit, we substituted oral

FIGURE 2. Two-month follow-up visit demonstrates worsening hair loss in frontal hairline.



finasteride with dutasteride 0.5mg 5 days/week. Because his diagnosis of LPP is new and he has continued disease activity, no HT is offered at this time. We will continue to see him for follow-up and escalate or adjust treatment as dictated by his symptoms and exam.

CASE REPORT #2

A 40-year-old female presented with a 10+ year history of hair loss. To the previous dermatologist, she reported her hair loss was worse after childbirth and there was a family history of pattern hair loss in both parents. Her exam at that time documented a high mid-frontal hairline and loss of hair density in the temporal recessions and temporal points. At her first visit to our clinic, she described intermittent pruritus in the bilateral temples and worsening of the right side more than left in the past few years. On our exam, she had a high frontal hairline, as previously described, with a mild widening of the central part line accentuated towards the frontal hairline (Figure 3, left). There were patches of more sparse alopecia covered up by a rim of thinning hair at the temporal hairline, right greater than left (Figure 3, right). On dermoscopy, there was mild perifollicular erythema and scant scale of bilateral temporal scalp but these signs were absent from the central part line (Figure 4).

FIGURE 3. Pre-transplantation photos show midline part with frontal accentuation of thinning (*left*) and worse alopecia of the right temple with anterior rim of hair (*right*).

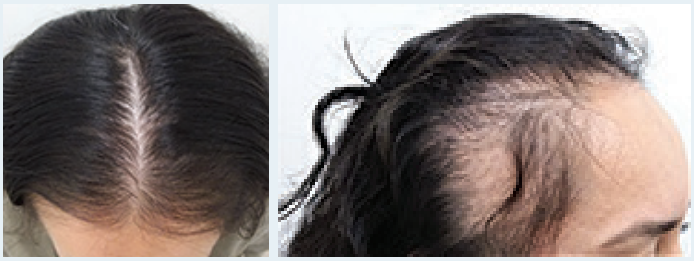
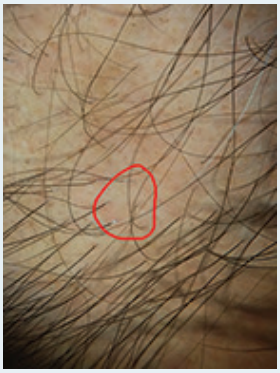


FIGURE 4. Dermoscopy shows scant perifollicular erythema and scale and areas with absent follicular ostia.



The diagnosis of LPP was made in the setting of a naturally high forehead and Ludwig class I-II frontal type hair loss. This patient lacked insurance so the diagnosis was made clinically and biopsy was not pursued. Treatment was started with clobetasol solution once per day and ILK 5mg/ml to temporal scalp monthly for 4 months. After 1 year, the scale and erythema nearly resolved with some regrowth in the temporal scalp. At that time, the patient opted to move forward with hair transplant by follicular unit transplantation (FUT) method. Consent was obtained emphasizing the risk of graft failure in LPP. Approximately 1,500 grafts were placed to lower her hairline and fill the scarred temporal areas. Per our post-op protocol for scarring alopecia, she continued her current therapy (clobetasol solution) and received additional prophylactic ILK 3mg/ml every 4-12 weeks for the first year. At 19 months post-operative, she has maintained growth of the grafts in all areas well (Figure 5).

FIGURE 5. Photos taken 19-months post-transplant show nice growth of midline (*left*) and right temple (*right*).

DISCUSSION

Scarring alopecia is not uncommon and can mimic or coexist with male or female pattern alopecia.[2] To avoid disastrous results in hair restoration surgery, a physician needs to perform a thorough physical examination of the scalp for signs of inflammation or scarring even when the outward appearance appears straightforward. LPP tends to have visible perifollicular erythema and a tight cuff of scale around inflamed hair follicles but, if subtle, these findings are more easily identified on a dermoscopic exam. Cases of LPP could also be mistaken for seborrheic dermatitis when overlapping with androgenic alopecia, so a dermatoscope can help differentiate that diagnosis as well.[3] A dermatoscope is a relatively inexpensive pocket-sized device that is easy to learn and implement into any hair clinic. It helps recognize patterns of hair loss that are not always evident to the naked eye. Dermatoscopes were first utilized for differentiating benign vs. malignant pigmented skin lesions (i.e., nevi vs. melanoma). They are now proven to be very helpful for comprehensive examination of the scalp and its appendages: hair follicles, eccrine glands, follicular ostia, and melanocytes.

Not only can the signs of LPP mimic pattern hair loss, but as in our presented cases, we demonstrated it can present concomitantly. Furthermore, confounding histories make reaching the correct diagnosis even more complex. Both of our patients had a family history of hair loss as well as other mitigating circumstances such as weight loss, divorce, and childbirth, which could raise consideration for telogen effluvium. Complicated histories like this underscore the need for a thorough history, physical exam, and sometimes lab work or biopsy to fully evaluate cases of alopecia in both men and women.

Patients with active LPP are contraindicated for hair transplantation.[4] If the physician is unfamiliar with the clinical signs of LPP, they can easily be overlooked and lead the surgeon to recommend a patient move forward with hair transplantation. Even hair transplantation into quiescent scarring alopecia is not favorable, and in the worst-case scenario results in complete graft failure, which is a disastrous outcome for both patient and surgeon.

Here, we presented two cases of hair loss seen for transplant consultation, both carried the diagnosis of pattern hair loss. With the use of a dermatoscope in the physical examination along with clinical suspicion, a secondary diagnosis of LPP was confirmed. This case report highlights the importance of using a dermatoscope in making an accurate diagnosis in patients with pattern alopecia to guide

➤ PAGE 86

CONTINUED FROM PAGE 85

appropriate treatment options and avoid surgical complications. As a hair restoration expert, you do NOT want to miss scarring alopecia, and if you are not actively looking, you will miss it.

References

1. Starace M, et al. Diffuse variants of scalp lichen planopilaris: clinical, trichoscopic, and histopathologic features of 40 patients. *JAAD*. 2020; 83(6):1659-1667.
2. Filbrandt R, et al. Primary cicatricial alopecia: diagnosis and treatment. *CMAJ*. 2013; 185(18):1579-1585.
3. Karadag Köse Ö, Güleç AT. Evaluation of a handheld dermatoscope in clinical diagnosis of primary cicatricial alopecias. *Dermatol Ther* (Heidelb). 2019; 9(3):525-535.
4. Baquerizo Nole KL, et al. Lichen planopilaris in the androgenetic alopecia area: a pitfall for hair transplantation. *Skin Appendage Disord*. 2015; 1(1):49-53. ■

Ellis INSTRUMENTS, INC

CONCIERGE SERVICE
FOR ALL OF YOUR
HAIR RESTORATION
INSTRUMENTATION SINCE
1995

Visit our new website:
ellisinstruments.com

4B Elmer Street, Madison, NJ 07940 • P: 800-218-9082 • P: 973-593-9222
F: 973-593-9277 • E: ellisinstruments.cellis@gmail.com

New WAW Wireless FUE System

A perfect balance between
technology and human touch.

Diverse Movement Options

- ✓ *Manual Movement*
- ✓ *Preprogrammed Movement*
- ✓ *Preprogrammed Touch-Sensitive*
- ✓ *Continuous Movement*

Choosing from a simple movement to the most advanced one.

You can place your order or
request more information
at *info@waw-fue.com*

devroye instruments

+32 2 880 70 64
info@waw-fue.com
www.devroyeinstruments.com