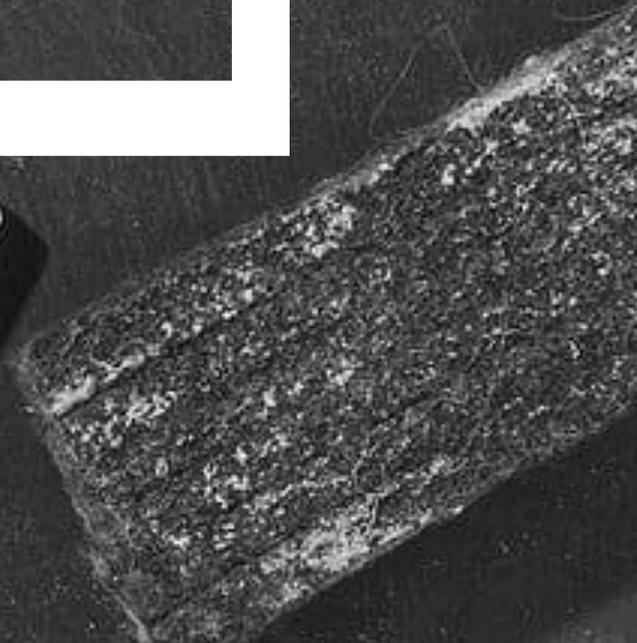


Sikatriyel Alopesilerde Tedavi Algoritması

Dr. Başak Yalıcı Armağan
Hacettepe ÜTF



Primer Sikatrisyel Alopesiler

• Tedavi Hedefleri:

- Yeni saç çıkışı !?
- Saç kaybının azalması/durması
- Semptomlarda gerileme
- Yaşam kalitesinde düzelmeye
- Hasta memnuniyeti



Batra P et al. Hair Loss in Lichen Planopilaris and Frontal Fibrosing Alopecia: Not Always Irreversible. Skin Appendage Disord 2020;6:125–129.

- Tedavi yanıtı min. 6 ayda değerlendirilmeli
- «Washout» period ort. 3 ay
- Fotoğraflama ve trikoskopi önemli

Primer Sikatrisyel Alopesiler

Lenfositik

- Kronik kutanöz lupus eritematozus (DLE)
- Liken planopilaris (LPP)
 - Frontal fibrozan alopesi (FFA)
 - Graham-Little sendromu
- Brocq'un psödopeladı
- Santral sentrifugal sikatrisyel alopesi (CCCA)
- Alopesi musinoza
- Keratozis folikularis spinuloza dekalvans

Nötrofilik

- Folikülitis dekalvans
- Dissekan selülit

Kombine

- Folikülitis keloidalis
- Folikülitis nekrotika
- Eroziv püstüler dermatoz

Lenfositik Primer Sikatrisyel Alopesiler

- Kronik kutanöz lupus eritematozus (DLE)
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- Keratozis folikularis spinuloza dekalvans



Kronik Kutanöz Lupus Eritematozus (DLE)

- %5-10 SLE birliktelik
- Dięer klinik ve lab bulguları
- **Kutanöz deęişiklikler
lezyonun merkezinde**
- Tedavi yanıtı iyi
- Foto-korunma!



Kronik Kutanöz Lupus Eritematozus (DLE)

1.basamak tedavi

Potent TKS ve/veya ILKS (10 mg/ml, 1-4/hf)

Kronik Kutanöz Lupus Eritematozus (DLE)

Asitretin ile Hq benzer etkili ancak asitretin ile yan etki daha yüksek

2.bas

Hidroksiklorokin (6.5 mg/kg/g veya 200-400 mg/g)

Sistemik retinoid [İsotretinoin (40-80 mg/g), Asitretin (50 mg/g)]

3 - 6. ayda yanıt yoksa

Hidroksiklorokin + kinakrin kombinasyonu

3 - 6. ayda yanıt yoksa

Klorokin + kinakrin kombinasyonu

%50 hastada yanıt +
2. Yılda %20 yanıt kaybı!!
2. antimalaryal ekle

Kronik kutanöz lupus eritematozus (DLE)

Sistemik steroid

- ≤ 1 mg/kg/g, 6-8 hf içinde azaltılarak kesilmeli, ort doz 40 mg/g

Diğer Tedaviler

- TKI
- Talidomid (50-100 mg/g)
- Dapson (50-100 mg/g)
- Mtx, siklosporin, AZA, UST, apremilast, plazmaferez

Liken Pilanopilaris (LPP)

- %50 liken planus birlikteliđi
- Perifoliküler eritem ve foliküler hiperkeratoz alopesik yamanın periferinde belirgin
- Genellikle tedaviye kısmi yanıt
- Spontan düzelme nadir
- İnflamasyon gerilese de saç kaybı devam edebilir!



Liken Pilonopilaris (LPP)

1. basamak sistemik tedavi

Hidroksiklorokin (6.5 mg/kg/g veya 200-400 mg/g)

En erken yanıt 6. ayda

Max. yanıt 12. ayda

%55 kısmi yanıt +
%45 min. yanıt veya yanıtız

Liken Pilonopilaris (LPP)

2.basamak sistemik tedavi

Sistemik retinoid (isotretinoin 1 mg/kg, asitretin 25 mg/g)

%66 yanıt +

3.basamak sistemik tedavi

Mikofenolat mofetil (MMF) (1000-3000 mg/g, 6g/g)

%50 yanıt +

Liken Pilanopilaris (LPP)

Diğer Tedaviler

- Siklosporin 3-5 mg/kg/g, 3-5 ay, **rekürrens sık**
- **Mtx etkili değil !**
- Pioglitazon 15-30 mg/g (**!! KKY ve mesane kanser riski, rekürrens**)
- Talidomid (100-200 mg/g) ?
- Tetrasiklin
- Doksisisiklin 2x 100 mg/g + Hq
- Rituksimab
- LMW heparin

Frontal Fibrozan Alopesi (FFA)



- Postmenapozal K > premenapozal K, E
- Kesin tanı: ≥ 4 puan
 - ✓ Foliküler ostiumlarda kayıp (klinik veya trikoskopik) ile birlikte frontal saç çizgisinde gerileme (2 puan)
 - +
 - ✓ Anterior saçlı deride perifoliküler eritem (1 puan)
 - ✓ Anterior saçlı deride perifoliküler hiperkeratoz veya skuam (1 puan)
 - ✓ Kaşlarda min %50 kayıp (AA yokluğunda) (1 puan)
 - ✓ FFA ile uyumlu biyopsi (frontal/temporal/kaş) (2 puan)

Frontal Fibrozan Alopesi (FFA)



Patern I - lineer
Saç yoğunluğunda azalma
olmaksızın saç çizgisinde
gerileme

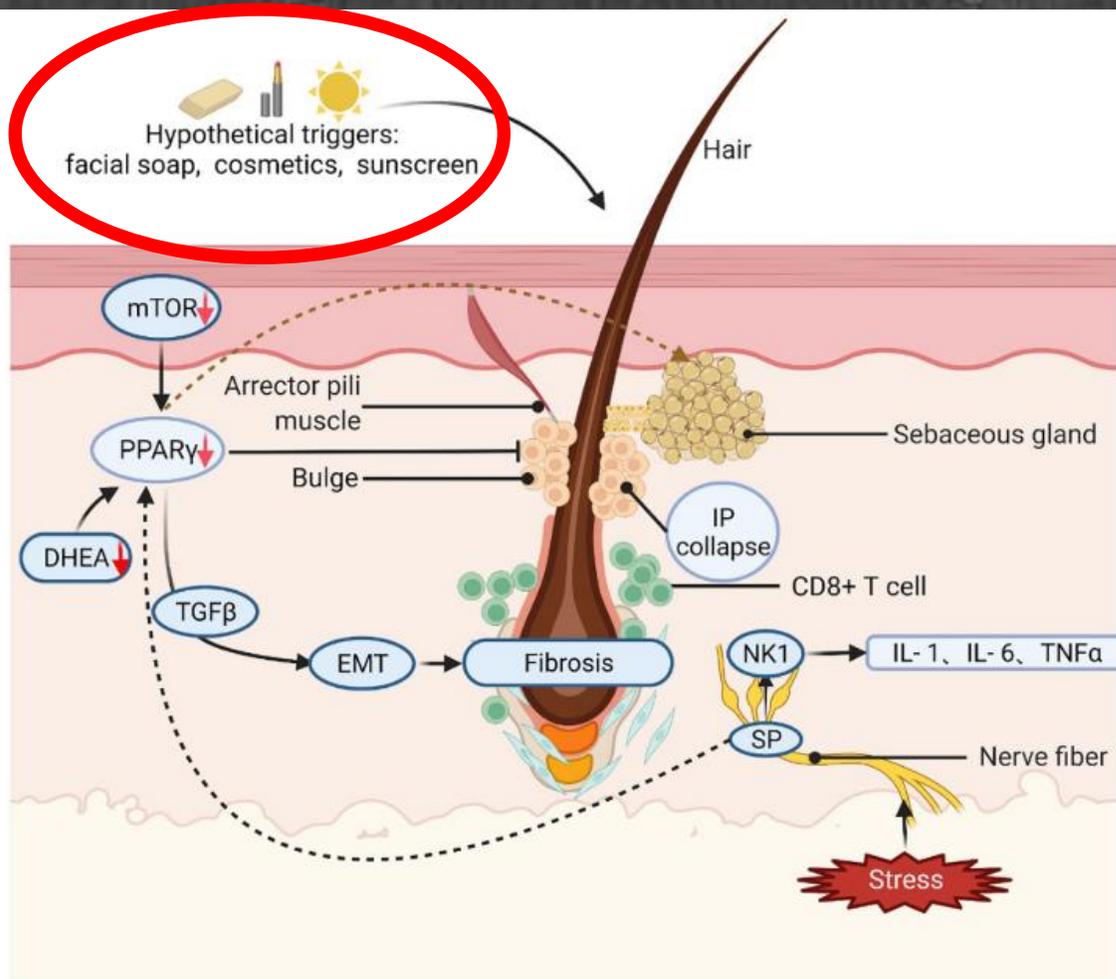


Patern II - difüz
Saç yoğunluğunda azalma ve
saç çizgisinde gerileme



Patern III – çift çizgi görünümü
Yalancı perçem paterni
Kaşlar sıklıkla korunmuş
Tedaviye direnç!

Frontal Fibrozan Alopesi (FFA)



**Nemlendirici, güneş
kremi, fondöten, sabun
gibi kozmetikler
kullanılırken
saçlı deri ve kaşlar
korunmalı**

Frontal Fibrozan Alopesi (FFA)

1. basamak

TKS+ILKS +/-TKI

Postmenapozal veya
Kontrasepsiyon
uyumlu K, E

Premenapozal
K, E

Hızlı
ilerleyen
hastalık

~%70
yanıt +

2. basamak

5 α RIs

Finasterid (2.5 mg/g, 12-18
ay) veya
Dutasterid (0.5 mg/g)

Hidroksiklorokin
(6.5 mg/kg/g
veya 200-400
mg/g)

Kısa süre sistemik
steroid

Prednizolon 25-50 mg/g, 4 hf
im depo steroid/3 hf

Frontal Fibrozan Alopesi (FFA)

Postmenapozal veya Kontrasepsiyon uyumlu K, E

3. basamak

Hidroksiklorokin (6.5 mg/kg/g veya 200-400 mg/g)
Doksisiklin

4. basamak

İsotretinoin 20 mg/g
Asitretin 20 mg/g

5. basamak

MTX 15-25 mg/hf

Frontal Fibrozan Alopesi (FFA)

Skin Appendage Disord 2017;3:111–113
DOI: 10.1159/000464334

Successful Treatment of Facial Papules in Frontal Fibrosing Alopecia with Oral Isotretinoin

Rodrigo Pirmez^a Bruna Duque-Estrada^a Taynara Barreto^a
Danielle C. Quintella^b Tullia Cuzzi^b

Departments of ^aDermatology and ^bPathology, Instituto de Dermatologia Professor Rubem David Azulay, Santa Casa da Misericórdia do Rio de Janeiro, Rio de Janeiro, Brazil

Received: 18 June 2020 | Revised: 20 August 2020 | Accepted: 30 August 2020
DOI: 10.1111/dth.14274

LETTER

DERMATOLOGIC
THERAPY WILEY

Facial papules of frontal fibrosing alopecia—Response to oral isotretinoin

Therapeutic response of facial papules and inflammation in frontal fibrosing alopecia to low-dose oral isotretinoin

Christine T. Pham, BS, Anna-Marie Hosking, MD, Surget Cox, MD, and
Natasha Atanaskova Mesinkovska, MD, PhD
Irvine, California

Başlangıç



30 mg/g 3. Ay



İsotretinoin
20-40 mg/g



Başlangıç



40 mg/g 6. Ay

Frontal Fibrozan Alopesi (FFA)

Stabil hastalıkta idame tedavisi

LH'nde TKS/ILKS +/- TKI

Tüm seçeneklere yanıtız hastalarda

PRP, excimer lazer

PRP (Platelet Rich Plasma)

References	Participant	Treatment	Outcome measurement	Primary outcome	Adverse effects	Duration of follow up
Case series/case reports						
Bolanča et al. (56)	A 25-year-old female with LPP	Intradermal PRP injection 3 ml 4 weeks apart for 3 sessions	Not specified	• Completed regression of itching and hair shading, no perifollicular erythema and perifollicular scaling on the trichoscopy	NR	NR
Jha (57)	• Two patients with LPP (Therapeutic pearl)	Intradermal PRP injection 3 weeks apart for 4 sessions	Not specified	• Significant hair thickening	NR	NR
Özcan et al. (58)	• A 44-year-old female with FFA	Intradermal PRP injection 0.1 ml/cm ² 4 weeks apart for 5 sessions in addition to TA injection, oral hydroxychloroquine, and topical minoxidil	Not specified	• After 4 weeks, perifollicular erythema, scaling, and lichenoid papules on the frontotemporal hairline were improved, and no further hair loss was noted after 20 weeks	NR	20 weeks
Jha (59)	• One patient with LPP (Therapeutic pearl)	Intradermal PRP injection 3 weeks apart for 4 sessions with topical 2% minoxidil	Not specified	• Significant hair thickening	NR	NR
Dina and Aguh (60)	• A 53-year-old woman CCCA with AGA • A 70-year-old with LPP	Intradermal PRP injection 4–4.2 ml 4 weeks apart for 3 sessions	Follicular density at hairline	• Greater than 50% improvement in hair density along hairline • No improvement in	NR	NR
Svigos et al. (61)	• Ten patients with FFA, FAPD, LPP 3 (30%) male, 7 (70%) female mean age 57.4 ± 15.84 years	Four PRP treatment sessions as an adjunctive	Hairline measurements from fixed points • Trichometric measurements • Photography	Four patients showed improvement • Three patients showed neither improvement nor worsening • One LPP patient showed disease progression	NR	NR
Suh et al. (62)	• A 36-year-old man with folliculitis decalvans • A 25-year-old man with folliculitis decalvans	Intralesional PRP combined with intralesional TA at 5–6 weeks interval and oral doxycycline	Not specified	• Symptomatic improvement after 1st session, trichoscopic improvement after 3–4 sessions in both cases	NR	NR
Polster et al. (63)	• A 48-year-old patient with SLE and DLE presented with scarring alopecia	Intralesional PRP	Hair regrowth	• Significant hair regrowth was observed	NR	NR
Klein et al. (64)	• A 46-year-old woman with biopsy proven LPP resisted to conventional treatment	Intralesional PRP with oral naltrexone	Hair density • Hair shedding	• Global improvement in hair density • Decreased hair shedding	NR	NR

AGA, androgenic alopecia; CCCA, central centrifugal cicatricial alopecia; DLE, discoid lupus erythematosus; FAPD, fibrosing alopecia in a pattern distribution; FFA, frontal fibrosing alopecia; LPP, lichen planopilaris; NR, not reported; PRP, platelet-rich plasma; SLE, systemic lupus erythematosus; TA, triamcinolone acetonide.

- 9 vaka/vaka serisi
- En çok 10 hasta
- Objektif değerlendirme
- 4/10 yanıt +
- Yöntem, uygulama ve seans sayıları standardize değil

Tejapira K, Yongpisarn T, Sakpuwadol N and Suchonwanit P (2022) Platelet-rich plasma in alopecia areata and primary cicatricial alopecias: A systematic review. Front. Med. 9:1058431.

Oral Minoksidil



REVIEW ARTICLE

Review of oral minoxidil as treatment of hair disorders: in search of the perfect dose

A. Villani,¹  G. Fabbrocini,¹ J. Ocampo-Candiani,²  A. Ruggiero,¹  S.S. Ocampo-Garza^{1,2,*} 

¹Dermatology Unit, Department of Clinical Medicine and Surgery, University of Naples Federico II, Naples, Italy

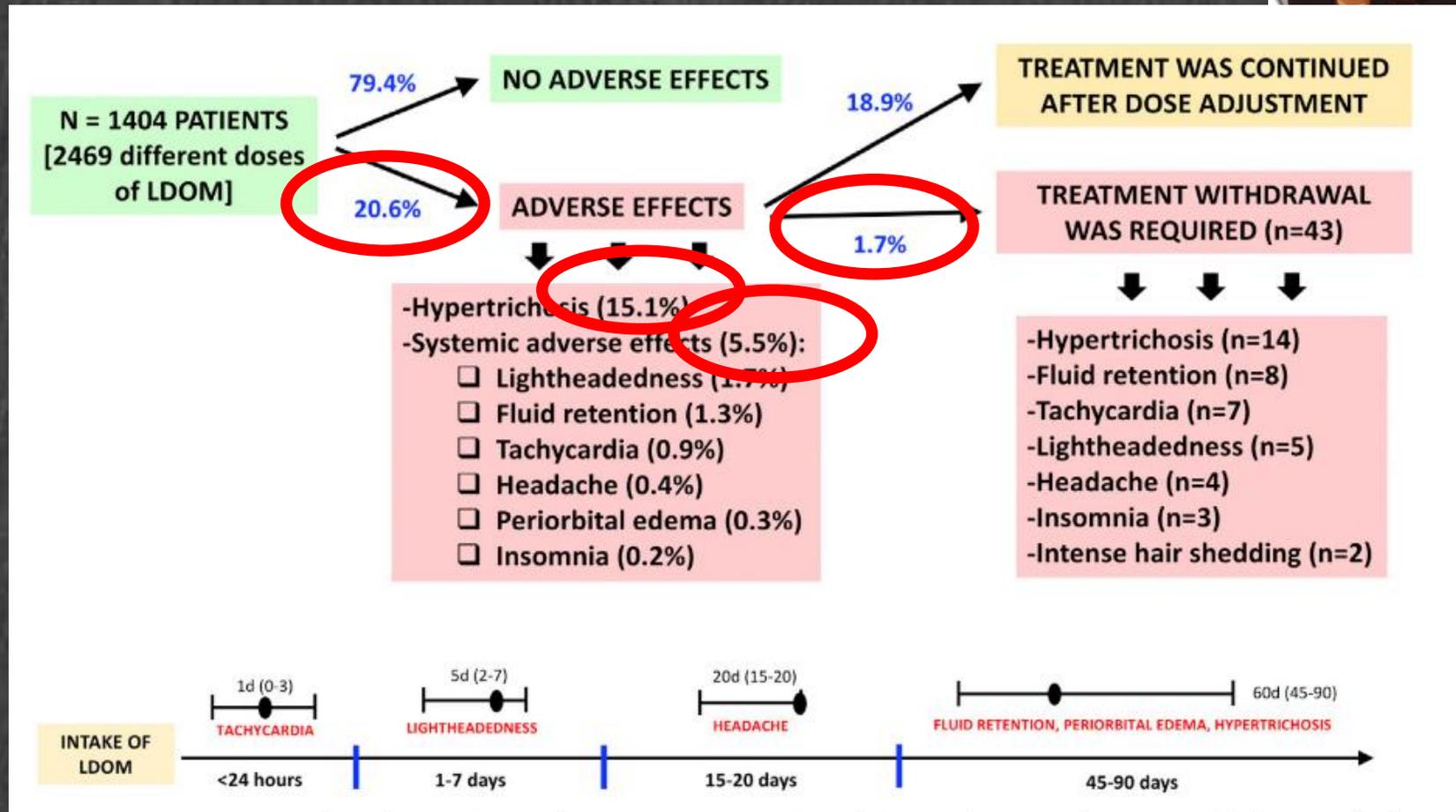
²Departamento de Dermatología, Hospital Universitario "Dr. José Eleuterio González", Universidad Autónoma de Nuevo León, Monterrey, Nuevo León, México

*Correspondence: S.S. Ocampo-Garza. E-mail: dra.soniaocampo@gmail.com

JEADV, 2021

Authors	Hair disorder	Study design	Patients (N)	Treatment	OM daily dosage	Side-effects	Results
Vano-Galvan <i>et al.</i> 2020	LPP	Retrospective. Mean duration of 21 months (range 6-87)	51 patients (36 women and 15 men)	No changes in concomitant treatments in the previous 6 months	Started at 0.25-1 mg and titrated up (median 1 mg)	Hypertrichosis 27%, postural hypotension 5%, tachycardia 4% and 2% weight gain	Hair thickness improved in 39%, remained stable in 53% and worsened in 8%
Cranwell <i>et al.</i> 2016	FFA	Case report. 36 months of treatment	1 woman	Dutasteride 0.1 mg, OM 1 mg, hydroxychloroquine 400 mg and intralesional triamcinolone	1 mg	No side-effects were reported	Stabilization of disease

Oral Minoksidil

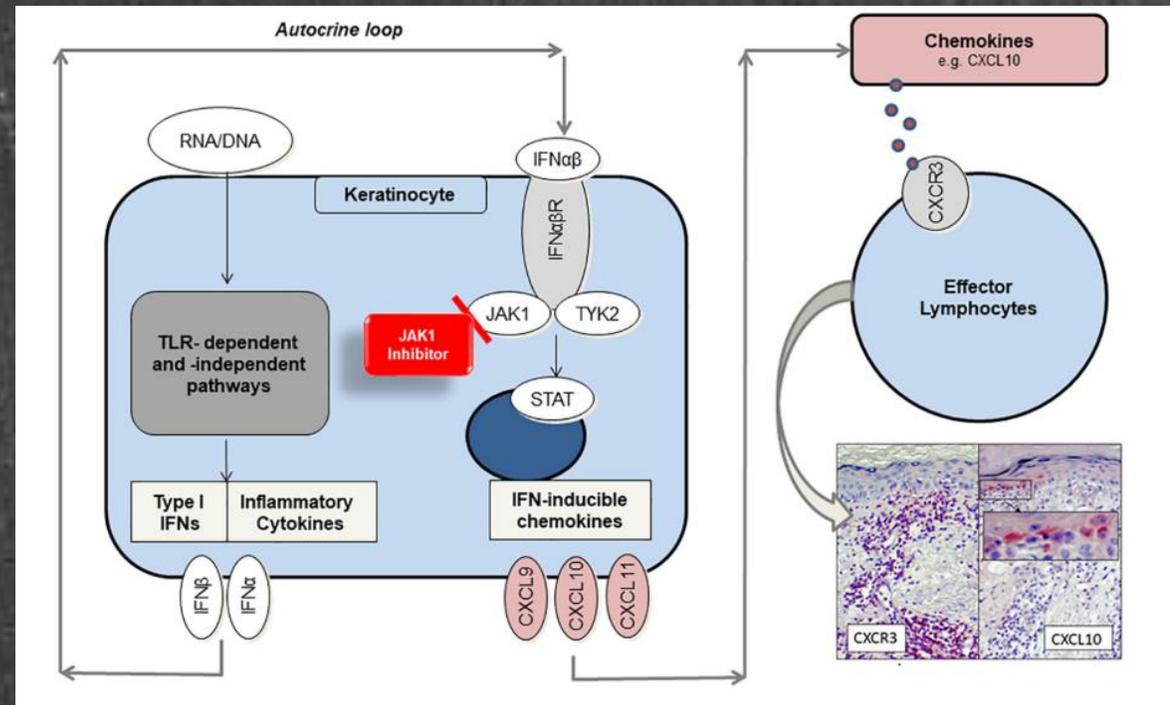


JAK inhibitörleri

Selective Janus Kinase 1 Inhibition Is a Promising Therapeutic Approach for Lupus Erythematosus Skin Lesions

Tanja Fetter¹, Paul Smith², Tugce Guel¹, Christine Braegelmann¹, Thomas Bieber¹ and Joerg Wenzel^{1*}

¹ Department of Dermatology and Allergy, University Hospital Bonn, Bonn, Germany, ² Incyte Corporation, Wilmington, DE, United States



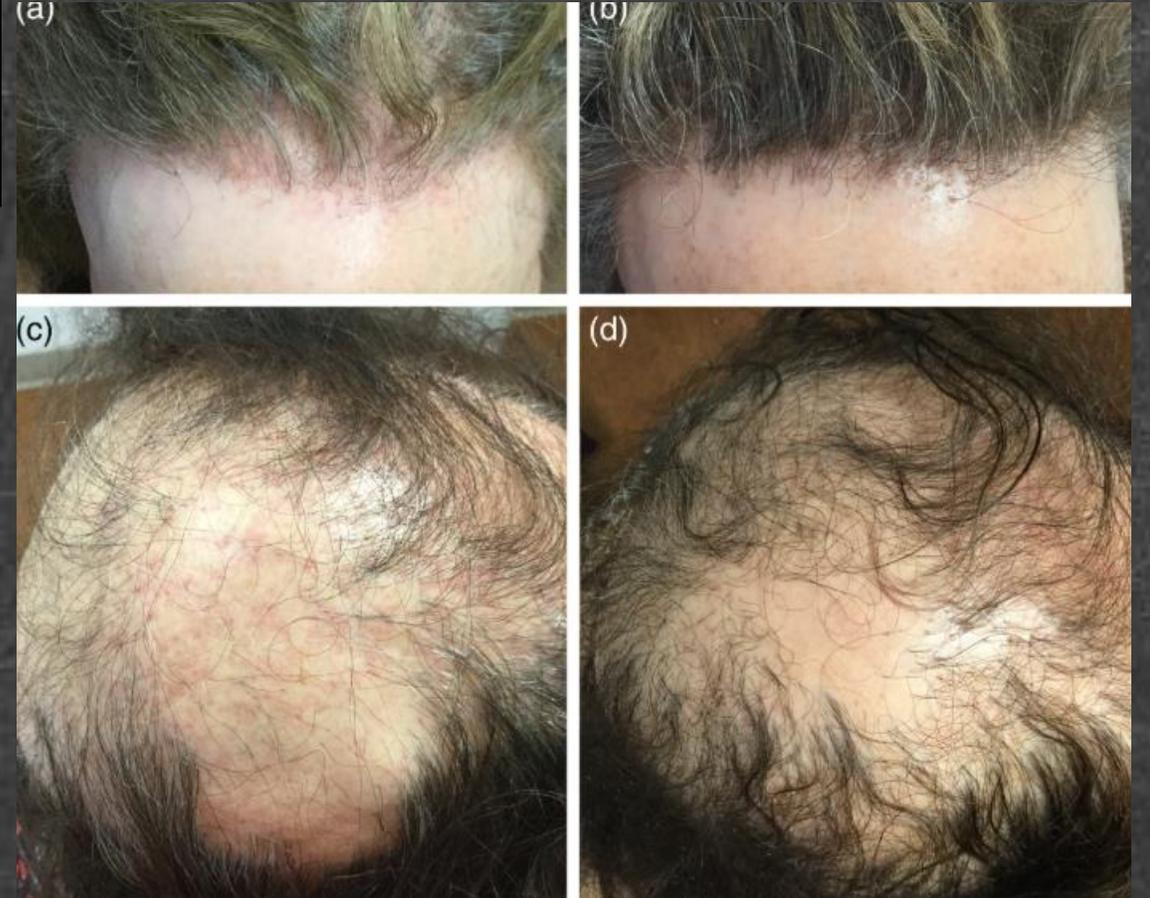
JAK inhibitörleri

Tofacitinib for the treatment of lichen planopilaris: A case series

Christine C. Yang¹ | Trisha Khanna² | Brigitte Sallee¹ | Angela M. Christiano^{1,3} |
Lindsey A. Bordone¹

Dermatologic Therapy. 2018

- 10 Dirençli LPP hastası
- 2-19 ay
- 10-15 mg/g tofacitinib
- 8/10 hasta yanıt + (4 ek tedavi alıyor)
- LPP aktivite indeksinde anlamlı azalma +



Saç ekimi

Skin
Appendage
Disorders

Review Article

Skin Appendage Disord 2019;5:65–71
DOI: 10.1159/000492539

A Systematic Review of the Outcome of Hair Transplantation in Primary Scarring Alopecia

Chloe Ekelem Christine Phan
Department of Dermatology and Dermatopathology

The literature reports compiled here emphasize the need for control of scarring alopecias when considering hair transplant surgery [6, 24]. However, the authors were unable to find evidence on how to precisely diagnose disease activity or the timing post-disease-activity when performing surgery is appropriate. The commonly suggested “two year” rule for hair transplant surgery post-disease-activity was not substantiated in this review [4, 15, 25]. There was a wide versatility of topical, intralesional, and systemic medications necessary for proper immunomodulation of graft recipient tissue. This review raises the need for affirming that inflammatory and scarring diseases on the scalp are well controlled, and defining the timing for a minimum of 2 and recommended up to 5 years prior to surgery.

Abstract

Importance:

Primary scarring alopecias are common and successful treatment options are limited. Steroids and immunosuppressants are the most commonly used treatments.

Objective:

To review the efficacy of hair transplantation in primary scarring alopecia.

Methods: A systematic literature search was conducted using PubMed to identify articles in scarring alopecia and hair transplants published from 1960 to the present time.

Results: Fifteen reports with 34 patients were included in this review. Twenty six patients experienced moderate to positive results, while 8 patients experienced negative results or recurrence of disease. Positive hair transplantation results have been reported in patients with central centrifugal cicatricial alopecia, en coup de sabre, discoid lupus erythematosus, pseudopelade de Brocq, and folliculitis decalvans. Positive and negative results were observed in patients with lichen planopilaris and frontal fibrosing alopecia.

Conclusion and Relevance: Findings show that hair transplant surgery can be considered as a treatment option for certain primary scarring alopecias. However, data must be interpreted with caution.

15 vaka/vaka serisi
34 hasta
%76'sında olumlu ?!
LPP ve FFA yanıt daha az

Saç ekimi

ORIGINAL ARTICLES

Lichen Planopilaris After Hair Transplantation: Report of 17 Cases

Donovan, Jeff MD, PhD, FRCPC^{1,2,3}

[Author Information](#) ⓘ

Dermatologic Surgery 38(12):p 1998-2004, December 2012. | DOI: 10.1111/dsu.12014

To present 17 patients diagnosed with LPP after hair transplant surgery.

MATERIALS AND METHODS

A retrospective review of the records of patients referred for evaluation of suboptimal growth after hair transplantation and diagnosed with LPP. Patients' scalps were evaluated using dermoscopy, and scalp biopsies were performed in all patients to confirm the diagnosis of LPP.

DISCUSSION

Seventeen patients (15 male, 2 female) were diagnosed with LPP after hair transplant surgery. The timing of disease occurrence was variable—4 to 36 months after hair transplantation. The most common symptom was itching. Perifollicular erythema or perifollicular scale, the classical dermatoscopic signs of LPP, was present in 12 patients (70%).

CONCLUSION

These data provide further support for an association between hair transplant surgery and the development of LPP. Traumatic skin injury from recipient site creation may be relevant to the pathogenesis. The incidence of this phenomenon and risk factors remain to be clarified.

Brocq'un Psödopeladı



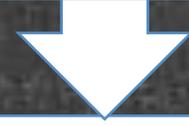
- Spesifik bir antite ?
- Diđer primer sikatrisyel alopesilerin son evresi mi ?
- Foliküler hiperkeratoz ve inflamasyon izlenmeyen atrofik alopesik yamalar
- Yavaş ilerleyici seyir

Brocq'un Psödopeladı



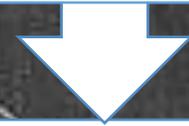
Topikal ve intralezyonel KS

Topikal kalsinörin inh.



Hidroksiklorokin (6.5 mg/kg/g veya 200-400 mg/g)

İsotretinoin 1mg/kg/g

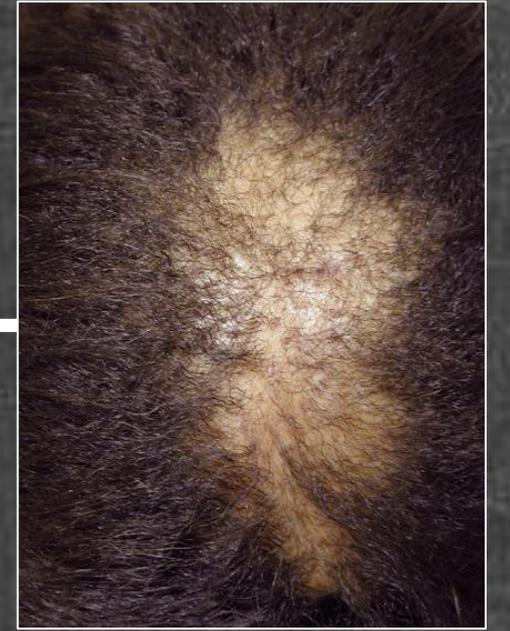


Sistemik steroid 0.5mg/kg/g

MMF

Santral Sentrifugal Skatrisyel Alopesi (CCCA)

- Orta yaş K
- Multifaktöriyel etyoloji
 - Genetik yatkınlık
 - Babada MPHL ile ilişki yok
 - Çevresel
 - Sıcak maşa kullanımı ile ilişki yok ?
 - Kimyasal düzleştirici kullanımı ile ilişki ?
 - Traksiyon ile ilişki ?



Santral Sentrifugal Skatrisyel Alopesi (CCCA)



Topikal ve intralezyonel KS

Doksisiklin (200 mg 6 ay, doz azaltılarak 1 yıl kullanım)



Hidroksiklorokin (6.5 mg/kg/g veya 200-400 mg/g)

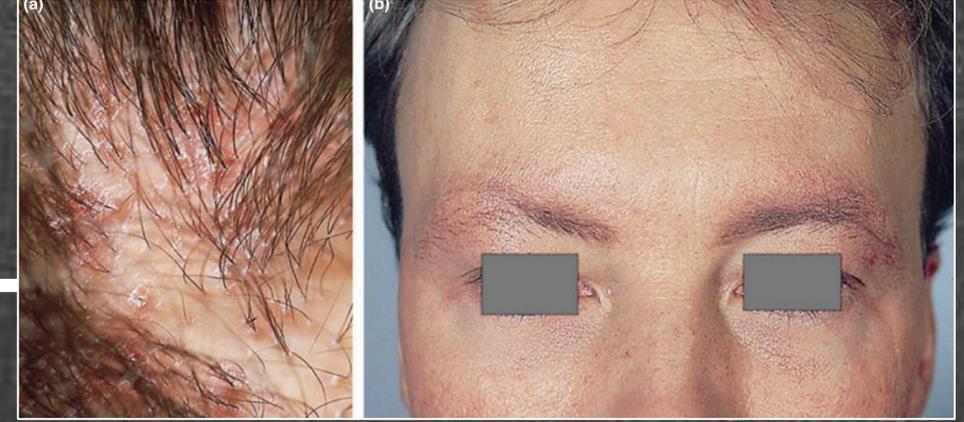
Sistemik steroid, MMF

Alopesi Müsinoza

- Foliküler musinöz
- Sıklıkla skarsız, nadiren skarlı alopesi
- Spesifik tedavisi yok
- Spontan rezolüsyon
- MF, SS ile ilişki
- Uzun dönem takip önerilir

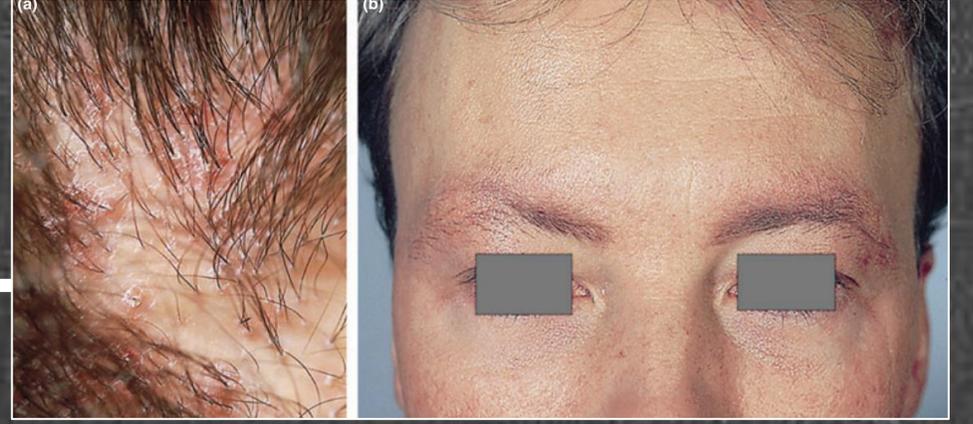


Keratozis Folikularis Spinuloza Dekalvans



- X'e baęlı, OD, OR geiř
- Erken ocukluk dneminde yzde keratozis pilaris
- Gvde ve extremitelere yayılım
- Sa/kař/kirpiklerde skarlı alopesiye progresyon
- Palmoplantar hiperkeratoz
- Fotofobi ve korneal anormallikler !! **Oftalmolojik muayene**
- Ergenlikte remisyon veya progresyon

Keratozis Folikularis Spinuloza Dekalvans



Topikal ve intralezyonel KS

Keratolitikler (salisilik asit, üre, topikal retinoidler)



İsotretinoin 1 mg/kg/g

Antibiyotikler



Dapson

Lazer epilasyon

Nötrofilik Primer Sikatrisyel Alopesiler

- Folikülitis dekalvans
- Dissekan selülit

Kombine Primer Sikatrisyel Alopesiler

- Folikülitis keloidalis
- Folikülitis nekrotika
- Eroziv püstüler dermatoz



Folikülitis dekalvans

- Folikül üst yarımında inflamasyon
- Tutam saç, püstüller ve kurutlar
- Patogenez: *S.Aureus tartışmalı*
- Bakteriyel/fungal kültür



Folikülitis dekalvans

Topikal tedaviler

Antibiyotik (mupirosin, fusidik asit, klindamisin, eritromisin)

TKS, ILKS

TKI

Triklosan

Sistemik tedaviler

Antibiyotik

(rifampisin+klindamisin 10 hf, siprofloksasin, klaritromisin, tetrasiklin, fusidik asit)

(1 yıla kadar kullanım)

İsotretinoin

Dapson (75-100 mg/g, 25 mg/g idame)

Diğer tedaviler

Çinko glukonat

Asitretin

Lazer epilasyon

PDT

Dissekan selülit

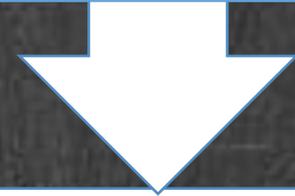
- Foliküler oklüzyon triadı
- Seronegatif artrit
- Folikül alt yarımında ve subkutan dokuda inflamasyon



Dissekan selülit

1. basamak sistemik tedavi

İsotretinoin (1 mg/kg/g min. \geq 4 ay)



2. basamak sistemik tedaviler

Prednizolon, ADA, INF

Dissekan selülit

Diğer Tedavi Seçenekleri

- Lazer epilasyon
- External beam radyasyon tedavisi
- Tam kat eksizyon ve greftleme
- Alitretinoin, Asitretin ?
- Çinko glukonat ?
- **Tetrasiklinler, dapson, kolşisin, AZA, MTX, PDT etkisiz!**

Folikülitis keloidalis



- Travma ve friksiyondan kaçınma
- Antibakteriyel ve keratolitik şampuan
- Topikal antibiyotikler
- ILKS
- Kriyoterapi
- Topikal retinoidler
- Topikal imiquimod 5-7 gün/hf, 8 hf

Folikülitis keloidalis



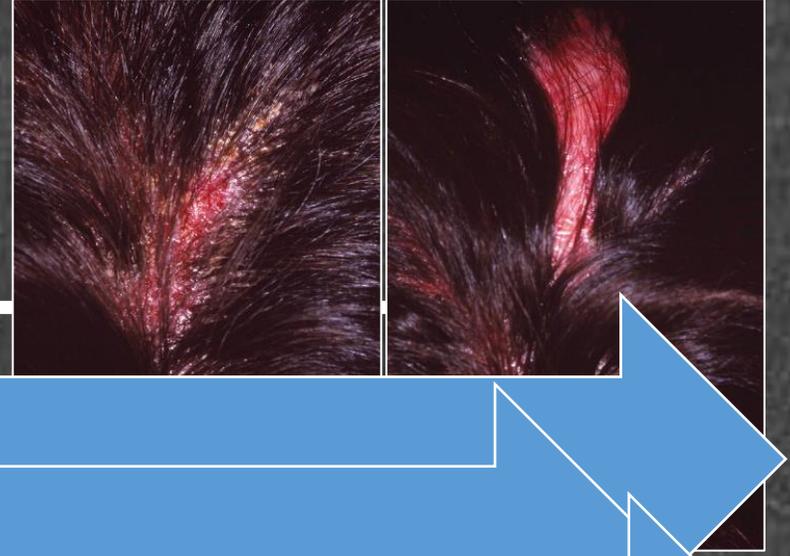
- **Sistemik antibiyotikler (tetrasiklin, eritromisin)**
 - Doksisisiklin 100 mg/g başlangıç, 50 mg/g idame
- **İsotretinoin**
- **Derin eksizyon primer kapama \pm ILKS/süper potent KS**
- **Derin punch eksizyon ve sekonder iyileşme (tekli papüllere)**
- **Lazer epilasyon**

Folikülitis nekrotika



- 2 form:
 - FN varioliformis (skarlı alopesi)
 - FN miliaris
- TKS
- ILKS
- Sistemik antibiyotikler (tetrasiklin)
- İsoetretinoin

Eroziv püstüler dermatoz



Topikal tedaviler

TKS

TKI

Dapson

Sistemik tedaviler

Oral prednizon

(15-40 mg/g, \leq 4 hf)

Doksisiklin

İsotretinoin (0.75 mg/kg/g)

Asitretin (50 mg/g)

Oral dapson (\leq 100 mg/g)

Diğer tedaviler

Çinko glukonat

(180-600 mg/g)

Özetle ...

- Erken tanı / ayırıcı tanı önemli
- İnflamasyon paternine göre farklılaşan kombinasyon tedavileri
- Tedavi yanıtı en erken 6. ayda
- Oral minoksidil ve Jak inh. lenfositik formlarda etkili olabilir
- Saç ekimi inflamasyon yokluğunda (min 2 yıl – ideal 5 yıl)

düşünülebilir

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Teşekkür ederim ...