

AAD **ANNUAL MEETING 2025**

AEDV 7 - 11
MARZO
ORLANDO

highlights



TRICOLOGÍA Y PATOLOGÍA UNGUEAL

MIRIAM FERNÁNDEZ PARRADO

HOSPITAL UNIVERSITARIO DE LEÓN
GRUPO PEDRO JAÉN

Una iniciativa de:



Con el patrocinio de:



AAD **ANNUAL MEETING 2025**

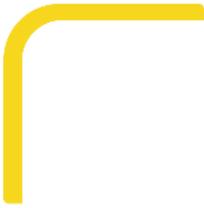
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**NO TENGO CONFLICTOS
DE INTERÉS**



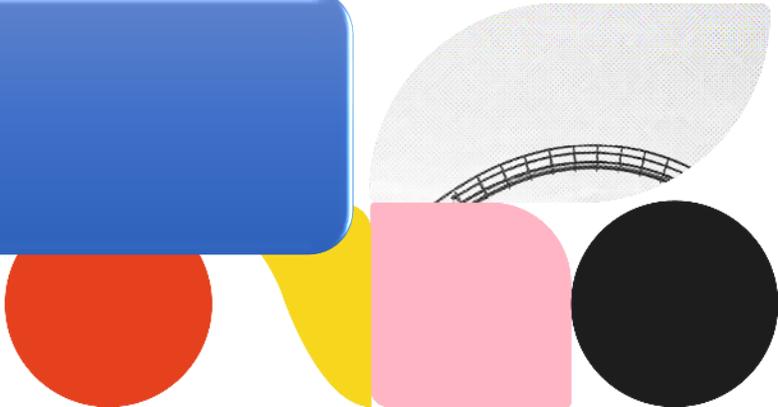


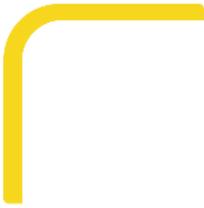
ALOPECIAS

- CICATRICIALES
- NO CICATRICIALES

TRASPLANTE CAPILAR

PATOLOGÍA UNGUEAL



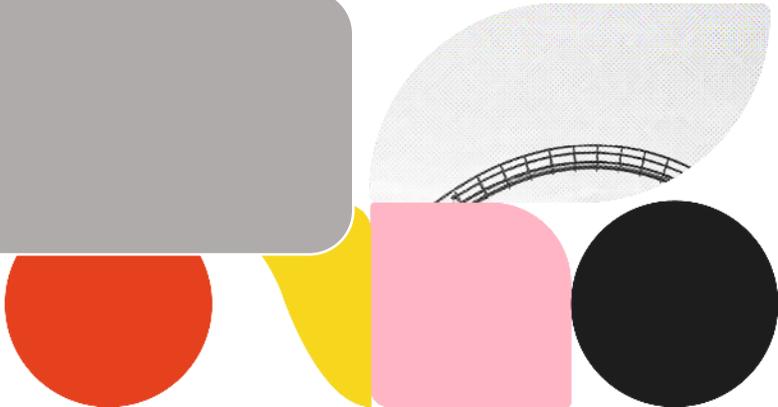


ALOPECIAS

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PATOLOGÍA UNGUEAL



ALOPECIAS CICATRICIALES

EFICACIA Y TOLERANCIA DE DOXICILINA A DOSIS BAJAS FRENTE A DOSIS ALTAS

Saphiro... Aceptado en JAAD

2 GRUPOS

- BAJA DOSIS: 20 40mg, 50mg
- ALTA DOSIS: 50mg, 100mg, 100mg

248 pacientes

- LIQUEN PLANO PILARIS
- ALOPECIA FRONTAL FIBROSANTE
- ALOPECIA CENTRAL CENTRÍFUGA

TRATAMIENTOS ADYUVANTES

CONCLUSIONES

+ Efectos adversos a dosis altas

Eficaz en la disminución de la inflamación independientemente de la dosis

No diferencias significativas en la progresión de pérdida de pelo, síntomas o resultados evaluados por médicos y pacientes



ALOPECIAS CICATRICIALES

JAK INHIBIDORES

> [J Am Acad Dermatol.](#) 2025 Jan;92(1):170-172. doi: 10.1016/j.jaad.2024.09.032.
Epub 2024 Sep 26.

Topical ruxolitinib in the management of frontal fibrosing alopecia and/or lichen planopilaris: A single-center retrospective cohort study

Kimberly N Williams¹, Sofia M Perez², Brandon Burroway², Antonella Tosti²

Topical tofacitinib for patients with lichen planopilaris and/or frontal fibrosing alopecia

Li-Chi Chen¹, Chino Ogbutor¹, Kristen J Kelley¹, Maryanne M Senna²

Delgocitinib 20mg/g crema 2 veces al día vs placebo fase 2^a ramdomizado, controlado y doble ciego

Table II. Clinical efficacy of topical ruxolitinib stratified by hair disorder and application frequency

	<25% reduction	25 to 75% reduction	>75% reduction
Hair disorder			
FFA	2/8 (25%)	3/8 (38%)	3/8 (38%)
LPP	4/6 (67%)	2/6 (33%)	0/6 (0.0%)
LPP/FFA	1/6 (17%)	4/6 (67%)	1/6 (17%)
All	7/21 (33%)	10/21 (48%)	4/21 (19%)
Application frequency			
Twice daily	1/4 (25%)	0/4 (0.0%)	3/4 (75%)
Daily	2/9 (22%)	6/9 (67%)	1/9 (11%)
Every other day	4/7 (57%)	3/7 (43%)	0/7 (0.0%)

FFA, Frontal fibrosing alopecia; LPP, lichen planopilaris.



ALOPECIAS CICATRICIALES

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Category	Topical Ruxolitinib Williams KN, [...], Tosti A. JAAD 2024	Topical Tofacitinib Chen LC, [...], Senna MM. JAAD 2024
N	20 (15 females, 5 males)	41 (37 females, 4 males)
Condition	FFA: 8/20 patients (40%) LPP: 6/20 patients (30%) LPP/FFA overlap: 6/20 patients (30%)	FFA: 31/41 patients (75.6%) LPP: 3/41 patients (7.3%) LPP/FFA overlap: 7/41 patients (17.1%)
Duration	8.5 months (range 3-24 months)	9 months
Efficacy	34% reduction in LPPAI ➔ 19% achieved ≥75% reduction	48% reduction in LPPAI ➔ 19.5% complete response
Dosage	1.5% cream every 12-24h	2% cream every 12-24h
Adverse Events	Scalp irritation 2 cases 1 discontinuation due to irritation	Scalp irritation (4.9%) Acne (2.4%) 1 discontinuation due to irritation

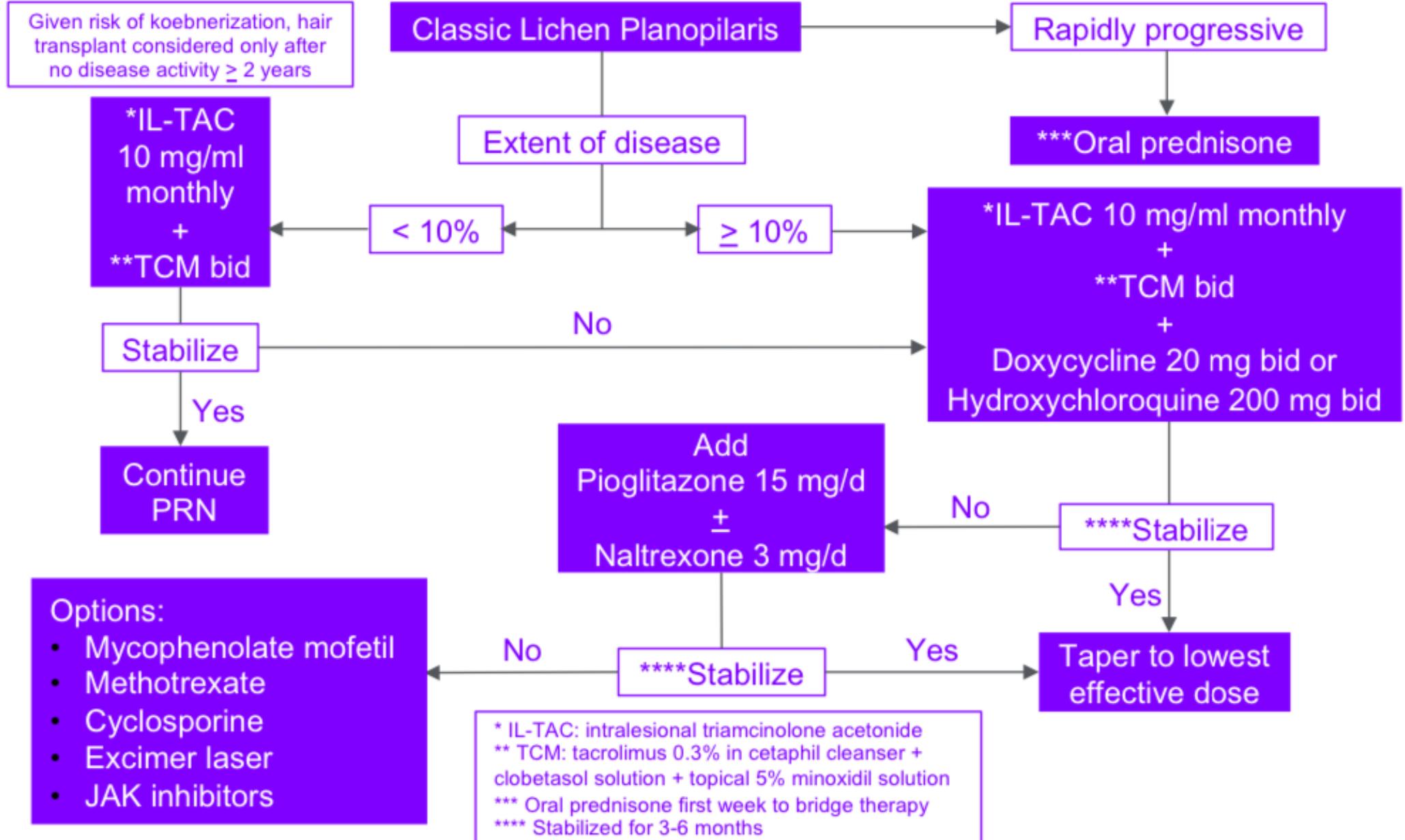




LIQUEN PLANO PILARIS



LPP Treatment Algorithm



LPP Treatment Algorithm



No más de 20mg al mes



Riesgo de supresión del eje

Given risk of koebnerization, hair transplant considered only after no disease activity ≥ 2 years

Classic Lichen Planopilaris

Rapidly progressive

Extent of disease

***Oral prednisone

< 10%

$\geq 10\%$

*IL-TAC 10 mg/ml monthly + **TCM bid

*IL-TAC 10 mg/ml monthly + **TCM bid + Doxycycline 20 mg bid or Hydroxychloroquine 200 mg bid

Stabilize

No

Yes

Continue PRN

Add Pioglitazone 15 mg/d \pm Naltrexone 3 mg/d

No

****Stabilize

Yes

Taper to lowest effective dose

Options:

- Mycophenolate mofetil
- Methotrexate
- Cyclosporine
- Excimer laser
- JAK inhibitors

No

****Stabilize

Yes

* IL-TAC: intralesional triamcinolone acetonide
 ** TCM: tacrolimus 0.3% in cetaphil cleanser + clobetasol solution + topical 5% minoxidil solution
 *** Oral prednisone first week to bridge therapy
 **** Stabilized for 3-6 months

LIQUEN PLANO PILARIS

November 2017

1140

VOLUME 16 • ISSUE 11

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ORIGINAL ARTICLE

Journal of Drugs in Dermatology

Novel Treatment Using Low-Dose Naltrexone for Lichen Planopilaris

Lauren C. Strazzulla BA, Lorena Avila MD, Kristen Lo Sicco MD, Jerry Shapiro MD

The Ronald O. Perelman Department of Dermatology, New York University School of Medicine, New York, NY

3mg/dia

Low-Dose Excimer 308-nm Laser for Treatment of Lichen Planopilaris

Alexander A. Navarini, MD, PhD
Antonios G. A. Kolios, MD
Bettina M. Prinz-Vavricka, MD
Susanne Haug, MD
Ralph M. Trüeb, MD

DECEMBER 2019

217

VOLUME 18 • ISSUE 12

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CASE REPORT

JOURNAL OF DRUGS IN DERMATOLOGY

Response of Lichen Planopilaris to Pioglitazone Hydrochloride

Erik L. Peterson BS, Daniel Gutierrez MD, Nooshin K. Brinster MD,
Kristen I. Lo Sicco MD, Jerry Shapiro MD

The Ronald O. Perelman Department of Dermatology, New York University School of Medicine, New York, NY

15-30 mg/dia

Effectiveness of low-level laser therapy in lichen planopilaris

Pablo Fonda-Pascual, MD, Oscar M. Moreno-Arrones, MD, David Saceda-Corralo, MD, Ana R. Rodrigues-Barata, MD, Cristina Pindado-Ortega, MD, Pablo Boixeda, MD, PhD, and Sergio Vaño-Galvan, MD, PhD



ALOPECIA FRONTAL FIBROSANTE



TREATMENTS FOR FRONTAL FIBROSING ALOPECIA 2025

Control of the INFLAMMATION

TOPICAL

Pimecrolimus 1% cream 2-3 t/wk

+/- Clobetasol 0.05% lotion 2 t/wk

or

+/- JAK inhibitors
(ruxolitinib, tofacitinib)

INTRALESIONAL INJECTIONS

+/- Triamcinolone 2.5-4 mg/mL

SYSTEMIC MEDICATION

+/- oral Hydroxychloroquine
4.5 mg/Kg/day

or

oral tetracyclines
systemic steroids
oral JAK inhibitors

Control of the PROGRESSION

SYSTEMIC MEDICATION

Oral dutasteride 0.5 mg/day
(or oral finasteride 5 mg/day)

+/- Pioglitazone 15 mg/day

Relief of the SYMPTOMS

Non-Pharmacological
Interventions

SYSTEMIC MEDICATION

Naltrexone 3 mg/night
or
Gabapentin 100-300 mg/day

INTRALESIONAL INJECTIONS

Botulinum toxin 50-100 UI

Improvement esthetics

HAIR DENSITY

Topical minoxidil 2-5%
Oral minoxidil 0.5-2 mg/day

SKIN ATROPHY

Platelet-rich plasma (PRP)

FACIAL PAPULES

Oral isotretinoin 10 mg 2-3 t/wk

HAIR RESTORATION

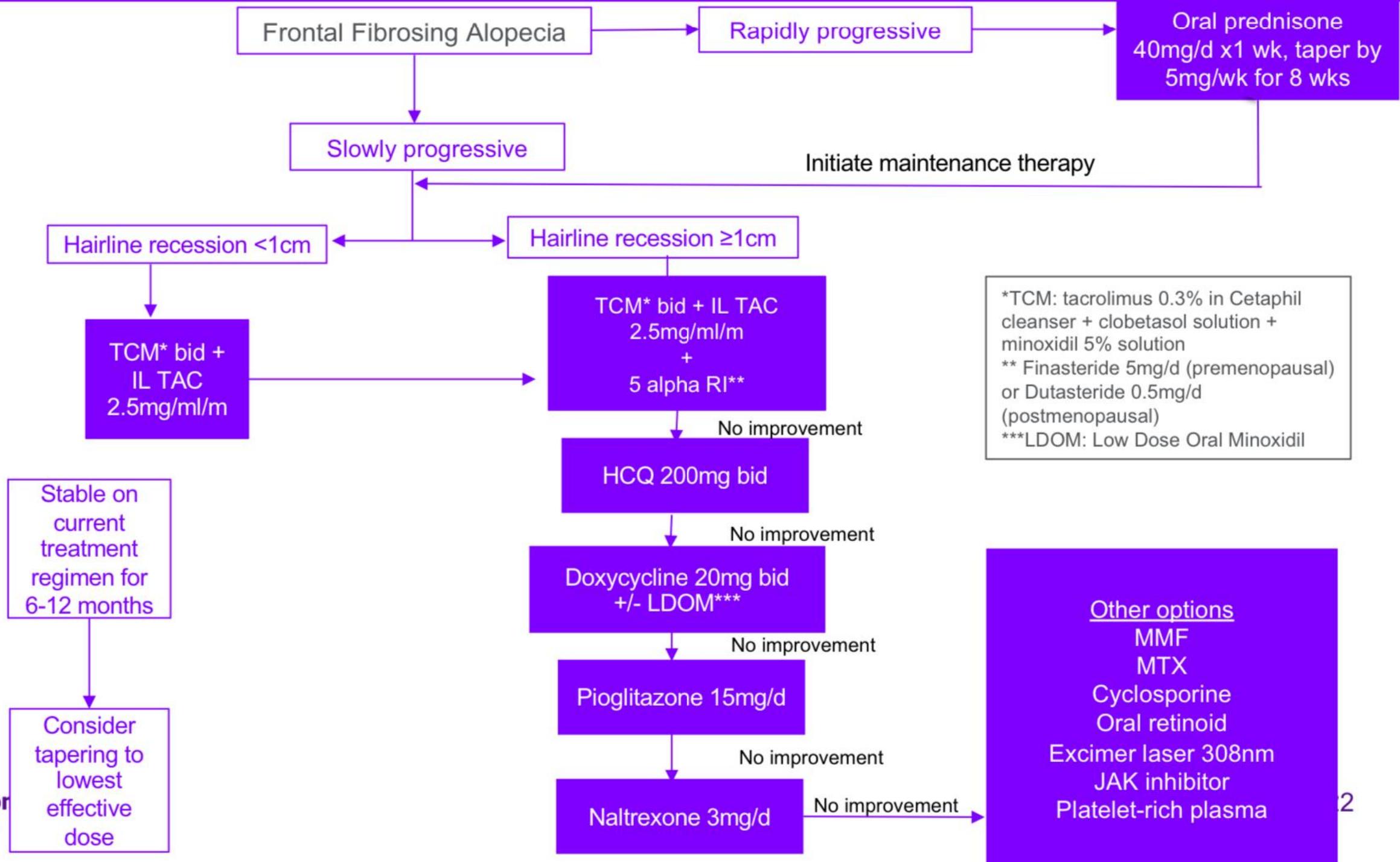
Loss of eyebrows

Micropigmentation

Alopecia

Scalp micropigmentation

Hair transplantation

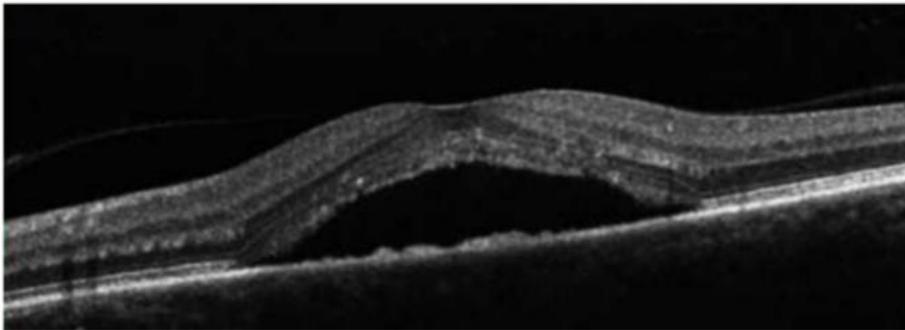


Central Serous Chorioretinopathy (CSC)

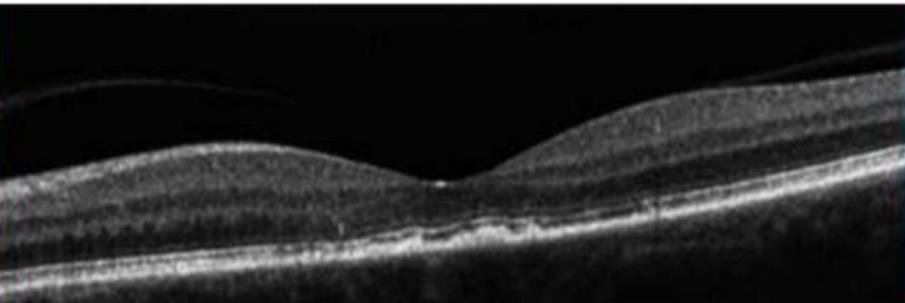
Category: Case Report

Title: Central serous chorioretinopathy after scalp and eyebrow intralesional triamcinolone acetonide injections: Report of two cases

Authors: Deesha Desai, BS^{1*}, Ambika Nohria, BA^{2*}, Lina Alhanshali, BA³, Michael Buontempo, BS⁴, Kristen I. Lo Sicco, MD², Craig Fern, MD⁵, Jerry Shapiro, MD²



During IL-TAC injections



After IL-TAC reduction

- CSC is **accumulation of fluid under retina**
- Two CSC cases after intralesional triamcinolone acetonide (IL-TAC) injections
- Case 1: Female received four monthly treatments (9 cc, 2.5 mg/cc), resulting in CSC. After an 8-month pause, injections were reduced to 4cc, leading to stabilization
- Case 2: Male received IL-TAC injections (2 cc, 2.5 mg/cc) to beard and chin and 9 cc to scalp and eyebrows. A month later, patient had intermittent blurry vision with CSC discovery. Discontinuation improved CSC

ALOPECIA FRONTAL FIBROSANTE

PÁPULAS FACIALES



ISOTRETINOINA

INICIO: 40mg/die 2 semanas

MANTENIMIENTO: 10-20mg
3 veces/semanas 3-6meses

RUXOLITINIB

The use of topical ruxolitinib 1.5% cream in frontal fibrosing alopecia: A case report

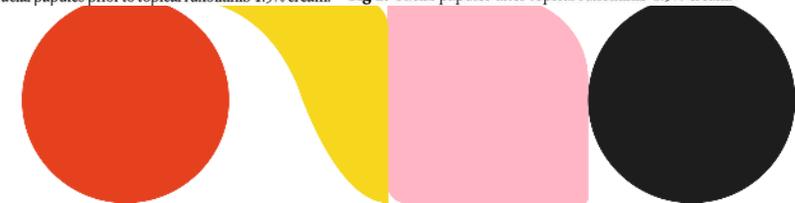
Deesha Desai, BS,^{a,b} Ambika Nohria, BA,^b Kristen Lo Sicco, MD,^b and Jerry Shapiro, MD



Fig 1. Facial papules prior to topical ruxolitinib 1.5% cream.



Fig 2. Facial papules after topical ruxolitinib 1.5% cream.



ALOPECIA FRONTAL FIBROSANTE EPICUTANEAS

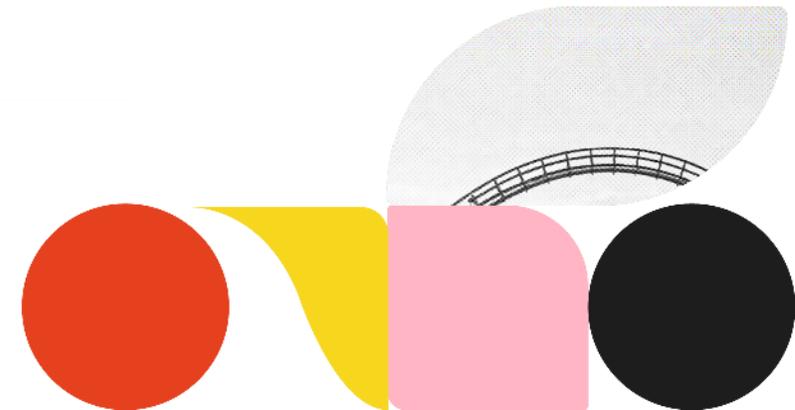
Overall, 45.2% of positive reactions in our series were to a fragrance

Allergen	MGH (n=42)	Aldoori et al (n=40)	Rocha et al (n=63)	Pastor-Nieto et al (n=36)	Diepgen et al (n=3119) ESTIMATES OF POSITIVE REACTIONS IN GENERAL POPULATION
% + relevant allergen	76%	52.5%	27%	80.5%	27%
Gallates	26.2%			16.6%	
Fragrance Mix I	14.3%	10.0%	5.0%	8.3%	0.9%
Linalool	19.0%	9.0%	8.0%	5.5%	
Limonene	4.8%			13.8%	
Ammonium persulfate	14.3%	22.5%			
Benzophenone 4	14.3%	12.5%	8.0%		
Benzyl salicylate	4.8%			22%	
Propolis	9.5%			16.6%	
MI/MCI*	11.9%	17.5%		2.8%	0.5%
Balsam of Peru	7.1%	12.5%	8.0%	5.5%	0.7%





ALOPECIA CENTRAL CENTRÍFUGA



ALOPECIA CENTRAL CENTRÍFUGA

Fibroproliferative genes are preferentially expressed in central centrifugal cicatricial alopecia

Crystal Aguh, MD,^a Yemisi Dina, BS,^b C. Conover Talbot, Jr, BS,^c and Luis Garza, MD,
Baltimore, Maryland, and Nashville, Tennessee

JAAD Journal of the
American Academy of Dermatology

RESEARCH LETTER | VOLUME 86, ISSUE 3, P661-662, MARCH 01, 2022

Association of type 2 diabetes with central centrifugal cicatricial alopecia: A follow-up study

Fritzlaine C. Roche, MS • Jasmine Harris, MS • Temitayo Ogunleye, MD • Susan C. Taylor, MD

Published: February 17, 2021 • DOI: <https://doi.org/10.1016/j.jaad.2021.02.036> • [Check for updates](#)



ALOPECIA CENTRAL CENTRÍFUGA

TÓPICA

ORAL

Metformina

Hair regrowth in 2 patients with recalcitrant central centrifugal cicatricial alopecia after use of topical metformin

Erinolaoluwa F. Araoye, BS,^a Jamael A. L. Thomas, MPH,^b and Crystal U. Aguh, MD^a
Baltimore, Maryland and Dallas, Texas

JAAD CASE REPORTS
FEBRUARY 2020

> JAMA Dermatol. 2024 Nov 1;160(11):1211-1219. doi: 10.1001/jamadermatol.2024.3062.

Low-Dose Metformin and Profibrotic Signature in Central Centrifugal Cicatricial Alopecia

Aaron Bao¹, Aasheen Qadri¹, Aditi Gadre^{1,2}, Elizabeth Will¹, Dina Collins¹, Rexford Ahima³, Lindsey A Bordone⁴, Crystal Aguh¹

500 mg/dia liberación prolongada

Summary of Dysregulated Pathways in CCCA and Metformin-Associated Pathway Changes

Formulada al 10%

Gene ontology pathway	CCCA-defined dysregulation ^a	Posttreatment with metformin ^b
Collagen fibril organization	Upregulated	Downregulated
Extracellular organization	Upregulated	Downregulated
Collagen catabolic process	Upregulated	Downregulated
Hair cycling	Downregulated	Upregulated
Keratinization	Downregulated	Upregulated
Unsaturated fatty acid biosynthetic process	Downregulated	Upregulated

Gene	Expression Change Post-Metformin	Relevance
MMP7	Decreased	Elevated plasma MMP7 levels correlate with declines in lung function in IPF and with liver stiffness in non-alcoholic fatty liver disease. Has also been defined as gene of interest in CCCA
COL6A1	Decreased	Decreased expression associated with fibroblast apoptosis. Murine studies have demonstrated that lack of COL6A1 promotes increased wound-induced hair regrowth
DCD	Decreased	DCD-derived peptides induce mast-cell activation ³⁷ , a process that has been histologically and translationally characterized in all forms of cicatricial alopecia
KRTAPs	Increased	Prior studies have substantiated the relevance of KRTAP dysregulation in diverse alopecic conditions

ALOPECIA CENTRAL CENTRÍFUGA

TÓPICA

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	Downregulated	Upregulated
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Formulada al 10%



Jack Inhibidores

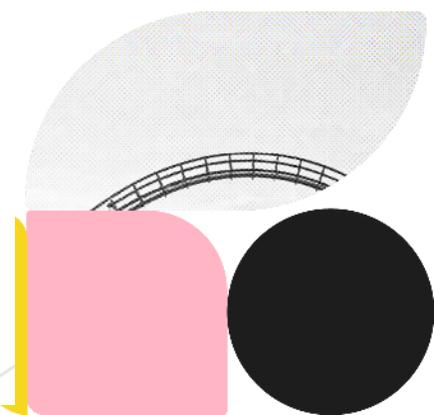
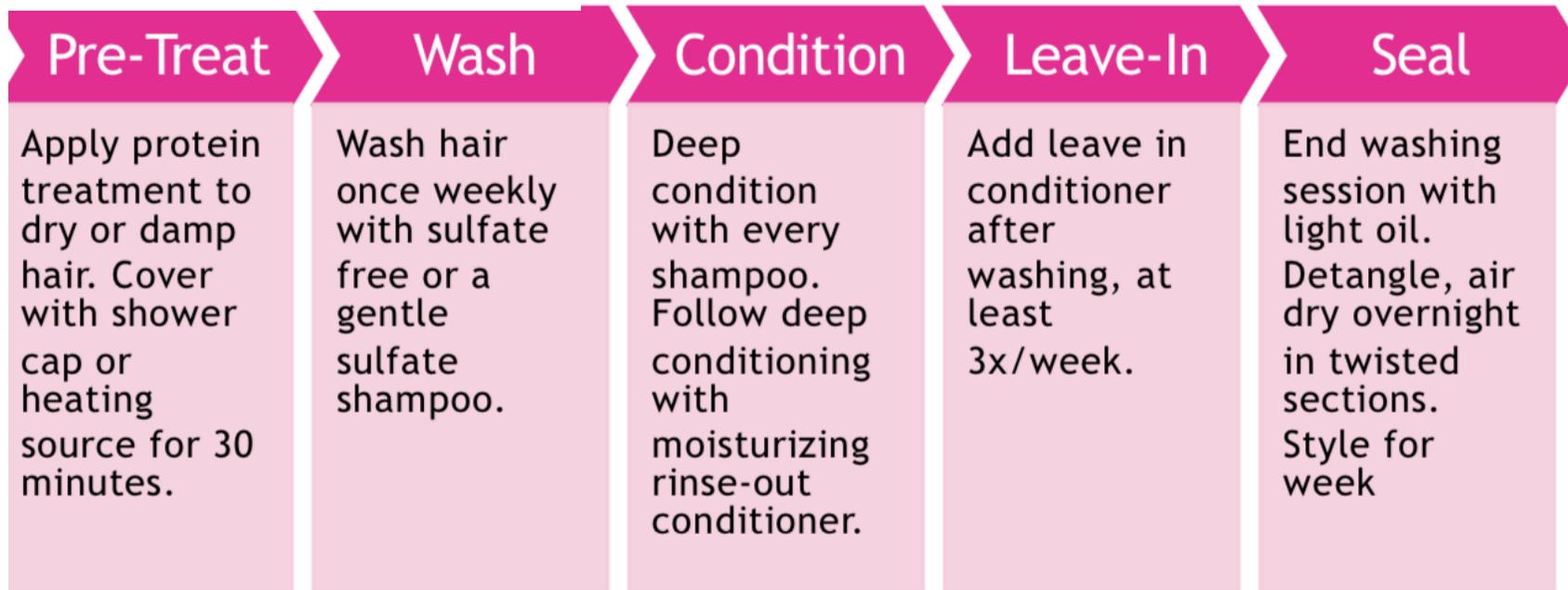
> JAAD Case Rep. 2023 Jul 28;39:109-111. doi: [10.1016/j.jidcr.2023.07.016](https://doi.org/10.1016/j.jidcr.2023.07.016)

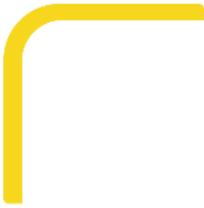
Hair regrowth in a patient with central centrifugal cicatricial alopecia after a 2-month trial of baricitinib

Kaelynn Workman^a, Chesahna Kindred^{b,*}

CUIDADO DEL CABELLO

- ▶ Cleanse the hair
- ▶ Dry slightly but do not dry completely
- ▶ Apply a moisturizer/emollient. Repeat often for extremely dry hair



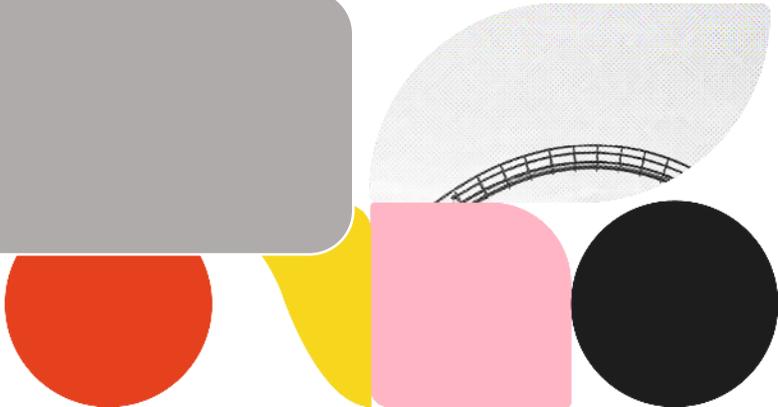


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TRASPLANTE CAPILAR

PATOLOGÍA UNGUEAL





ALOPECIA AREATA



ALOPECIA AREATA

JAK INHIBIDORES

CUÁNDO PARAR

NO SUSPENDER A LOS 6 MESES SI NO HA HABIDO REPOBLACIÓN, ESPERAR



NO SUSPENDER INMEDIATAMENTE TRAS LA REPOBLACIÓN

- Baricitinib: empezar con 4mg, tras repoblación reducir a 2mg
- Ritlecitinib: 50mg al día y si va bien A PARTIR DEL AÑO, 50mg días alternos

Cardiovascular and Venous Thromboembolic Risk With JAK Inhibitors in Immune-Mediated Inflammatory Skin Diseases
A Systematic Review and Meta-Analysis

Jenne P. Ingrassia, BA^{1,2}; Muhammad Haisum Maqsood, MD³; Joel M. Gelfand, MD⁴; et al

Comparison of comorbidities and adverse events in dermatology and rheumatology patients prescribed tofacitinib: A retrospective analysis

Carli D Needle ¹, Elizabeth J Klein ¹, Jessica Gjonaj ², Ambika Nohria ¹, Maria Karim ³, Lynn Liu ¹, Jinal Shah ², Rebecca A Betensky ², Michael Garshick ⁴, Kristen Lo Sicco ¹, Theodora K Karagounis

SEGURIDAD

Los efectos secundarios de tofacitinib en A.reumatoide **NO son extrapolables a los pacientes con AAreata tratados con iJack.**

Eventos cardiovasculares e infección grave: solo en cohorte A.Reumatoide
Alteraciones analíticas: + pacientes con A.reumatoide

PERO...

Dada la extensión del uso de iJacks en otras patologías dermatológicas se necesitarían más estudios específicos



ALOPECIA AREATA

JAK INHIBIDORES

CUÁNDO PARAR

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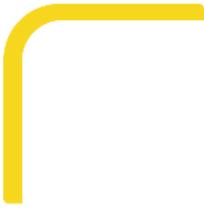
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Alteraciones analíticas: + pacientes con A.reumatoide

BARICITNIB	↑ LDL Y TAMBIÉN HDL
RITLECITINIB	DOLOR DE CABEZA
deuruxolitinib	DOLOR DE CABEZA ↑ LDL Y HDL



ALOPECIA AREATA

ALTERNATIVAS

Dupilumab induces hair regrowth in pediatric alopecia areata: a real-world, single-center observational study

[Eden David](#)^{1,#}, [Neda Shokrian](#)^{1,2,#}, [Ester Del Duca](#)¹, [Marguerite Meariman](#)¹, [Jacob Glickman](#)¹, [Sabrina Ghalili](#)¹
[Seungyeon Jung](#)^{1,3}, [Kathryn Tan](#)¹, [Benjamin Ungar](#)¹, [Emma Guttman-Yassky](#)^{1,✉}





ALOPECIA ANDROGENÉTICA



ALOPECIA ANDROGENÉTICA

MESOTERAPIA DRS. VAÑO/SACEDA

- BICALUTAMIDA 1ml al 0,5%

Mejoría de densidad a partir de la 3ª sesión

Mejoría de seborrea

Case Reports > Int J Trichology. 2023 Jan-Feb;15(1):39-40. doi: 10.4103/ijt.ijt_78_21.
Epub 2023 Apr 19.

Mesotherapy with Bicalutamide: A New Treatment for Androgenetic Alopecia

Alba Gomez-Zubiaur¹, Juan Jose Andres-Lencina¹, Víctor Cabezas¹, Cristina Corredera¹,

- PRP: efectivo, más con activación química, más de 3 sesiones y jóvenes

- TOXINA BOTULÍNICA



PERO...

Puede ser útil en la tricodinia de las alopecias cicatriciales

MESOTHERAPY WITH OTHER AGENTS

OUR CLINICAL EXPERIENCE (further studies are needed)

MINOXIDIL

- Very painful injections
- Sessions every 2 weeks needed (half life 4 hours)
- Consider in patients with no oral or topical treatments

MELATONIN

- We used it initially for telogen effluvium and AGA
- Poor improvement
- Expensive compounding

VITAMINES

- Vitamines, growth factors, peptides...
- Limited experience in our group
- May be useful in combination with other medical therapies

EXOSOMES

- Not approved for micro-injections yet in Spain
- Probably an effective therapy in the future

ALOPECIA ANDROGENETICA

EXOSOMAS

Son vesículas extracelulares que facilitan la comunicación intercelular al transportar proteínas, lípidos y ácidos nucleicos



Potencial terapéutico no solo en alopecia, curación de heridas, psoriasis, vitíligo, dermatitis atópica y lupus

Diferentes según la célula de origen

**SECRETOMA DE LAS CÉLULAS
MANDRE DEL FOLÍCULO
PILOSO**

EXOSOSOMA + otros
componentes

En estudio observacional





ALOPECIA ANDROGENETICA

FOTOBIMODULACION

Clinical Trial > Photodermatol Photoimmunol Photomed. 2024 Nov;40(6):e13004.

doi: 10.1111/phpp.13004.

Red and Green LED Light Therapy: A Comparative Study in Androgenetic Alopecia

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Sirashat Hanvivattanakul ¹, Yossawat Rayanasukha ³, Thitikorn Bo
Kittipong Tantisantisom ³

Effects of photobiomodulation on human hair dermal papilla cells with various light modes and light parameters

Yi Ren ^a, Angze Li ^a, Xiaojing Miao ^a, Longfei Huo ^a, Haokuan Qin ^b, Hui Jiang ^b,

Optimal parameters:

Irradiance	10 mW/cm ²
Duty Cycle	80%
Wavelength	500 Hz
Dose	8.8 J/cm ²



ALOPECIA ANDROGENETICA

► [Front Pharmacol. 2024 Jun 3;15:1370833. doi: 10.3389/fphar.2024.1370833](#)

> [Int J Pharm. 2024 Dec 5;666:124802. doi: 10.1016/j.ijpharm.2024.124802. Epub 2024 Oct 4.](#)

A finasteride patch for the treatment of androgenetic alopecia: A study of promoting permeability strategy using synthetic novel O-acylmenthols combined with ion-pair

Hui Li ¹, Peng Sun ², Shuhan Liu ³, Liuyang Wang ⁴, Yang Zhang ⁵, Jie Liu ⁶, Liang Fang ⁷

Stimulation of hair regrowth in an animal model of androgenic alopecia using 2-deoxy-D-ribose

[Muhammad Awais Anjum](#) ¹, [Saima Zulfiqar](#) ¹, [Aqif Anwar Chaudhary](#) ¹, [Ihtesham Ur Rehman](#) ^{1,2}, [Anthony J Bullock](#) ³, [Muhammad Yar](#) ^{1,*}, [Sheila MacNeil](#) ^{3,*}

Misma eficacia que minoxidil, no beneficio de combinarlos

ENSAYOS CLÍNICOS

Phase 1b/2a trial evaluating the safety and efficacy of DLQ01 for the treatment of AGA) in men

Prostaglandin F2 α analog

CLASCOTERONA AL 5 Y AL 7,5%

Pyrilutamide KX826
(Androgen receptor antagonist)

HMI-115

(Prolactin monoclonal antibody)

Topical Androgen Receptor Degradar (AR-PROTAC) for AGA

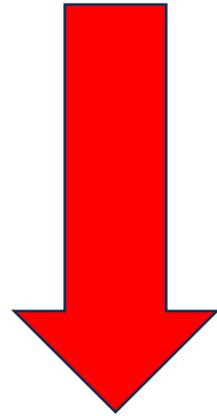


SENESCENCIA CAPILAR

- Diámetro

- Densidad

- Número de folículos



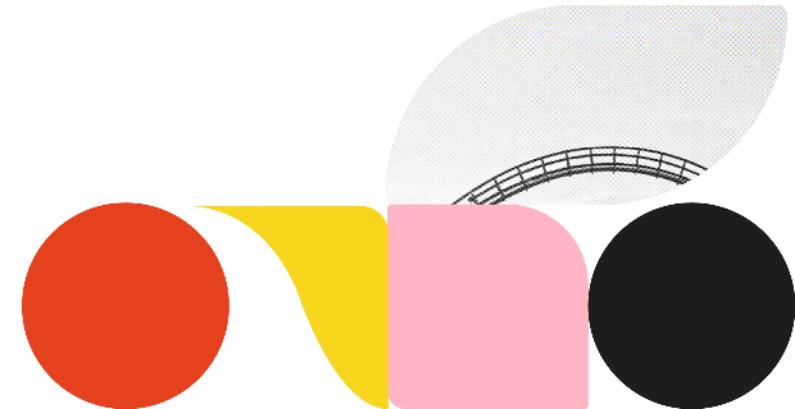
Pero... En ausencia de AGA NO es visible

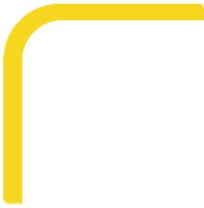
AGENTES SENOLÍTICOS

Rapamicina

Dasatinib

Quarcetina



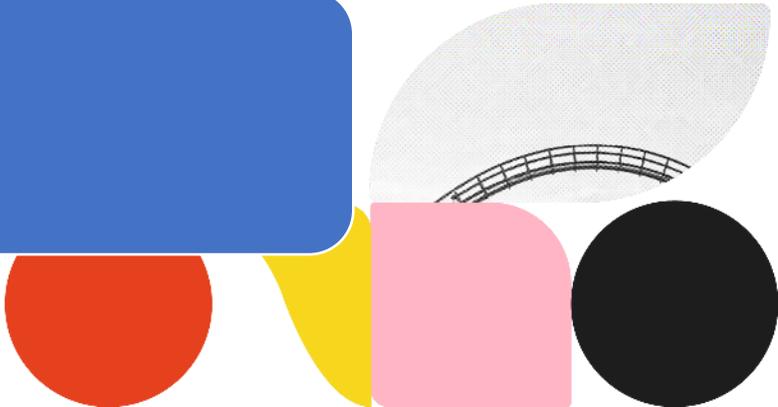


ALOPECIAS

- CICATRICIALES
- NO CICATRICIALES

TRASPLANTE CAPILAR

PATOLOGÍA UNGUEAL



ONICOMICOSIS

HONGOS NO DERMATOFITOS

Más frec. en mujeres (2:1)

¿Por qué?

Uso de sandalias, estrógenos....



TRATAMIENTO

Mechanism of action and dosing of Oral Antifungal Drugs [1].

Drug	Mechanism of Action	Spectrum of Activity	Dosing
Griseofulvin	Inhibits fungal mitosis	Dermatophytes	Daily for 6–12 months
Ketoconazole	Inhibits ergosterol synthesis	Broad-spectrum	Daily for 6–12 months
Itraconazole	Inhibits ergosterol synthesis	Broad-spectrum	Pulse dosing or continuous
Fluconazole	Inhibits ergosterol synthesis	Broad-spectrum	Weekly for several months
Terbinafine	Inhibits squalene	Dermatophytes, some yeasts	Daily for 6–12 weeks

OBLIGATORIO REPETIR EL EXAMEN MICOLÓGICO

Aspergillus, Fusarium, Penicilium, Scopulariopsis brevicaulis, Acremonium

TABLE 5 Efficacy of mono-antifungal therapies by NDM genera (≥5 patients per treatment regimen).

Treatment	Dosage	Duration	Patients (n)	Mycological cure	Clinical improvement*	Effective cure
<i>Alternaria</i>						
Terbinafine (continuous) ¹³⁴	250 mg/d	12–24 weeks	8	5/8 (62.5%)	3/8 (37.5%)	3/8 (37.5%)
<i>Aspergillus</i>						
Terbinafine (continuous) ^{16,134}	250 mg/d	12–24 weeks	9 ^b	5/7 (71.4%)	4/7 (57.1%)	6/9 (66.7%)
Terbinafine (pulse) ¹³⁵	500 mg/d for 1 week/month	12 weeks	34	30/34 (88.2%)	30/34 (88.2%)	30/34 (88.2%)
Itraconazole (pulse) ^{16,136–138}	200 mg BID for 1 week/month	8–20 weeks	9 ^c	6/7 (85.7%)	4/8 (50%)	5/8 (62.5%)
<i>Fusarium</i>						
Itraconazole (pulse) ^{16,136,137,143–145}	200 mg BID for 1 week/month	8–24 weeks	25 ^d	11/12 (91.7%)	9/12 (75%)	10/23 (43.5%)
Amphotericin B ¹⁴⁰	2 mg/mL reconstituted from intravenous mixture. Applied 1–3 drops per day	48 weeks	5	4/5 (80%)	5/5 (100%)	4/5 (80%)
<i>Neoscytalidium</i>						
Terbinafine ¹⁵¹	NR	NR	5	4/5 (80%)	NR	NR
Itraconazole ¹⁵¹	NR	NR	8	4/8 (50%)	NR	NR
Fluconazole ¹⁵¹	NR	NR	7	2/7 (28.6)	NR	NR
Amorolfine ^{15A,151}	5% twice weekly	Follow-up every 2 months until cure	28	25/28 (89.2%)	14/28 (50%)	14/28 (50%)
<i>Scopulariopsis</i>						
Urea cream 40% ¹⁵¹	NR	NR	80	45/80 (56.2%)	NR	NR
Urea cream 40% ¹⁵¹	NR	NR	76	36/76 (47.4%)	NR	NR
<i>Scopulariopsis</i>						
Terbinafine (continuous) ^{137,141}	250 mg/d	12 weeks	14 ^b	11/13 (84.6%)	12/13 (92.3%)	12/14 (85.7%)
Itraconazole (pulse) ^{16,136,137,141}	200 mg BID for 1 week/month	8–16 weeks	32 ^b	24/26 (92.3%)	22/26 (84.6%)	24/32 (75%)
Fluconazole ¹⁴¹	150 mg/d	12 weeks	12	8/12 (67%)	8/12 (67%)	8/12 (67%)
Griseofulvin ¹⁴¹	600 mg BID	52 weeks	11	0/11 (0%)	3/11 (27.3%)	0/11 (0%)
Ketoconazole ¹⁴¹	200 mg/d	16 weeks	12	8/12 (67%)	10/12 (83.3%)	8/12 (67%)
Ciclopirox nail lacquer ¹⁶	8% applied daily	8–12 months	6	NR	NR	5/6 (83.3%)

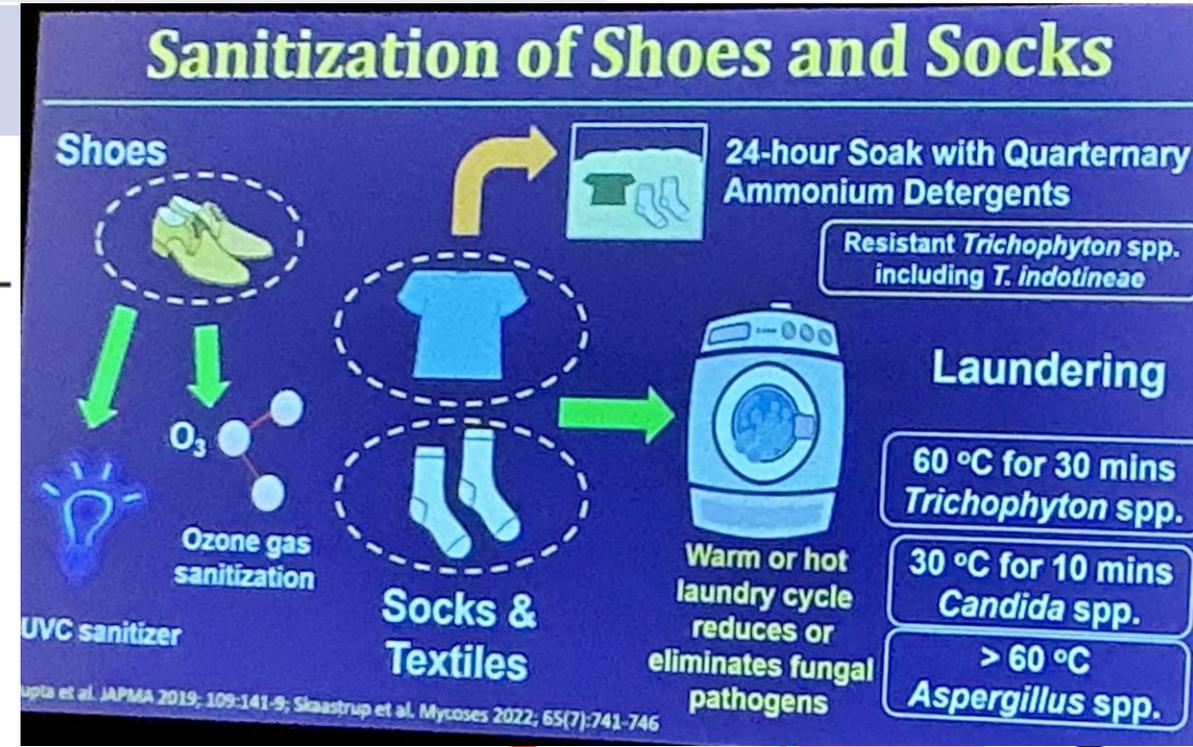
RESISTENCIAS A TERBINAFINA

A pesar de mutaciones en el gen SQLE (prevalencia del 20%), solo una pequeña proporción serán resistentes a la terbinafina

REGIMEN ALTERNATIVO	DURACIÓN	INDICACIÓN FDA
ITRACONAZOL 200mg	12-16 semanas	Dedos del pie
ITRACONAZOL 200mg/12horas durante 1 semana, 3 semanas de descanso	Repetir 3-4 veces	Dedos de la mano
FLUCONAZOL 150-300mg/semana	Varios meses, hasta crecimiento uña	

Disinfection trials with terbinafine-susceptible and terbinafine-resistant dermatophytes

Kristoffer Nagy Skastrup^{1,2} | Karen Marie Thyssen Astvad² |
 Maiken Cavling Arendrup^{2,3,4} | Gregor Borut Ernst Jemec^{1,3} |
 Ditte Marie Lindhardt Saunte^{1,2,3}



TÓPICOS Y OTROS TRATAMIENTOS

- Antifúngicos tópicos como primera opción en pediatría

Drug (Time, N)	Negative Fungal Culture	Mycological Cure	Complete Cure
Ciclopirox 8% solution (week 32, N=35)	77.1%	-	34.2%
Efinaconazole 10% solution (week 52, N=60)	88.3%	65.0%	40.0%
Tavaborole 5% solution (week 52, N=54)	87.2%	36.2%	8.5%



- Antifúngicos tópicos de última generación tratamiento de elección en dermatofitoma
- Son compatibles con los esmaltes de uñas
- Tratamiento laser puede ayudar pero NO CURA
- **Nuevos tratamientos:** ondas microondas, ME111 (inhibe succinato deshidrogenasa), anfotericina B tópica, NP213 (Novexatin, inhibe peptidasas y proteasas fúngicas)



PATOLOGÍA UNGUEAL INFLAMATORIA

PSORIASIS

- Triamcinolone acetonide
- Methotrexate
- 5-Fluorouracil
- Cyclosporine
- Secukinumab
- Botulinum toxin

LÍQUEN PLANO

- Triamcinolone acetonide
- Methotrexate
- 5-Fluorouracil

Dose/frequency

Triamcinolone acetonide (i.m. / i.a. solution)

- **Dilution:** 2.5-10 mg / mL with 1% lidocaine, or with saline
- **Dose:** 0.1-0.2 ml of the solution injected in each quadrant of the nail
- **Frequency** of infiltrations: every 30-40 days

- No response after 4-6 sessions
- Signs of side effects

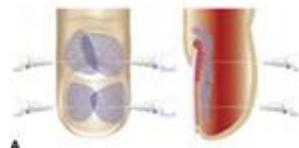
Change Therapy!

Rigopoulos et al. J Am Acad Dermatol. 2019; 81: 228-240.
Iarizzo et al. J Am Acad Dermatol. 2020; 83: 1717-1723.
Ricardo et al. Arch Dermatol Res. 2024; 316: 113.

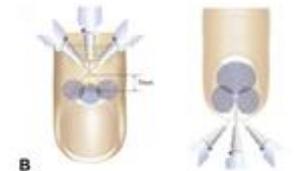
Technique

Mode of injection

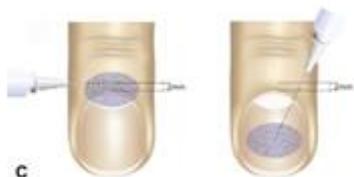
A. De Berker & Lawrence



B. Richert



C. Grover & Bansal



Inhibidores JAK

- Tofacitinib 5mg
- Baricitinib 4mg
- Upadacitinib 15mg/día
- Abrocitinib 200mg/día

Resolución en
6 meses



Tofacitinib 2% 2 veces
al día

COMPLICACIONES DE LA CIRUGÍA UNGUEAL

Complications and Avoiding Them

Table 1: Complications per procedure type in a cohort containing 373 nail procedures over 7 years

	Avulsion (n= 68)	Ablation (n=3)	Matrix Excision (n=25)	Fold Punch (n=6)	Matrix Punch (n=31)	Bed Punch (n=115)	Matrix Shave (n=98)	Bed Shave (n=27)
Actual Infection	4, 6%	0, 0%	0, 0%	1, 17%	0, 0%	1, 1%	0, 0%	0, 0%
Nail Plate Deformity	6, 9%	0, 0%	2, 8%	1, 17%	2, 6%	0, 0%	8, 8%	1, 4%
Hospitalizations	1, 1%	0, 0%	0, 0%	0, 0%	0, 0%	0, 0%	0, 0%	0, 0%
Pterygium/ Scarring	0, 0%	0, 0%	1, 4%	0, 0%	0, 0%	3, 3%	0, 0%	0, 0%
Postoperative Pain	3, 4%	1, 33%	5, 20%	3, 50%	3, 10%	9, 8%	10, 10%	1, 4%
Adverse Drug Reaction***	0, 0%	0, 0%	0, 0%	0, 0%	0, 0%	6, 5%	2, 2%	2, 7%
Neuropathy	0, 0%	0, 0%	0, 0%	0, 0%	0, 0%	1, 1%	2, 2%	0, 0%
Movement Difficulties	1, 1%	0, 0%	0, 0%	0, 0%	0, 0%	0, 0%	0, 0%	0, 0%

* [n] Reported as number of complications for each type of complication per procedure type

**[%] was calculated by dividing the number of each complication type by the number of procedures for each procedure type [e.g.100% x (# of infections for avulsions/ total number of avulsions)]

*** Directly due to medications prescribed for post-operative pain or oral antibiotics. |

**Unpublis

Complications and Avoiding Them

Table 2: Patient reported concerns per procedure at postoperative follow-up appointments

	Avulsion (n= 68)	Ablation (n=3)	Matrix Excision (n=25)	Fold Punch (n=6)	Matrix Punch (n=31)	Bed Punch (n=115)	Matrix Shave (n=98)	Bed Shave (n=27)
Infection Concern	3, 4%	0, 0%	1, 4%	0, 0%	0, 0%	1, 1%	11, 11%	1, 4%
Cosmetic Concern	9, 13%	0, 0%	3, 12%	1, 17%	3, 10%	3, 3%	14, 14%	4, 15%

* [n] Reported as number of reported patient concerns for each type of patient concern per procedure type

**[%] was calculated by dividing the number of each concern type by the number of procedures for each procedure type [e.g.100% x (# of patients with infection concerns for avulsions/ total number of avulsions)]

Preventing and Treating Infection

- o Most common with nail avulsion, followed by procedures that involve incisions in the proximal nail fold (matrix excision, matrix biopsy, nail fold biopsy)
- o No published data on this but pseudomonal infection is the most common in my population.
- o Most nail surgeons do not recommend routine prophylactic abx.
- o Symptoms typically being ~3 days post procedure

Recommendations

1. Treat existing green nail prior to any nail procedure
2. Post procedure abx that cover pseudomonas with avulsions when working with inflamed nail folds and digital mucinous cysts of proximal nail fold.

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highlights



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