



# ALOPECIA FRONTAL FIBROSANTE

Generalidades y aspectos terapéuticos

Jorge Alejandro Castellanos Angarita  
Dermatología  
PUJ

# Generalidades

- Tipo de alopecia cicatricial primaria adquirida.

## Definición

## Historia

- Descrito por Kossard en 1994.
- Aumento incidencia en últimos años.

- Recesión frontotemporal.
- Cambios “irreversibles”
- Dificultad tto.

## Base

# Factores epidemiológicos

Grupo	Diferenciadores	Asociaciones
<ul style="list-style-type: none"><li>• Mujeres postmenopáusicas. (55-70 años).</li><li>• 3-5% casos son hombres.</li></ul>	<ul style="list-style-type: none"><li>• 80-90% blancas.</li><li>• Negras: 74% premenopáusicas.</li><li>• 5-8% historia familiar.</li></ul>	<ul style="list-style-type: none"><li>• Enfermedad tiroides: 5-23%.</li><li>• AGA: 2-44%.</li><li>• LPP: 1-16%.</li><li>• MLP: 3-17%.</li></ul>

# Etiología, genética y factores de riesgo.

## Generales

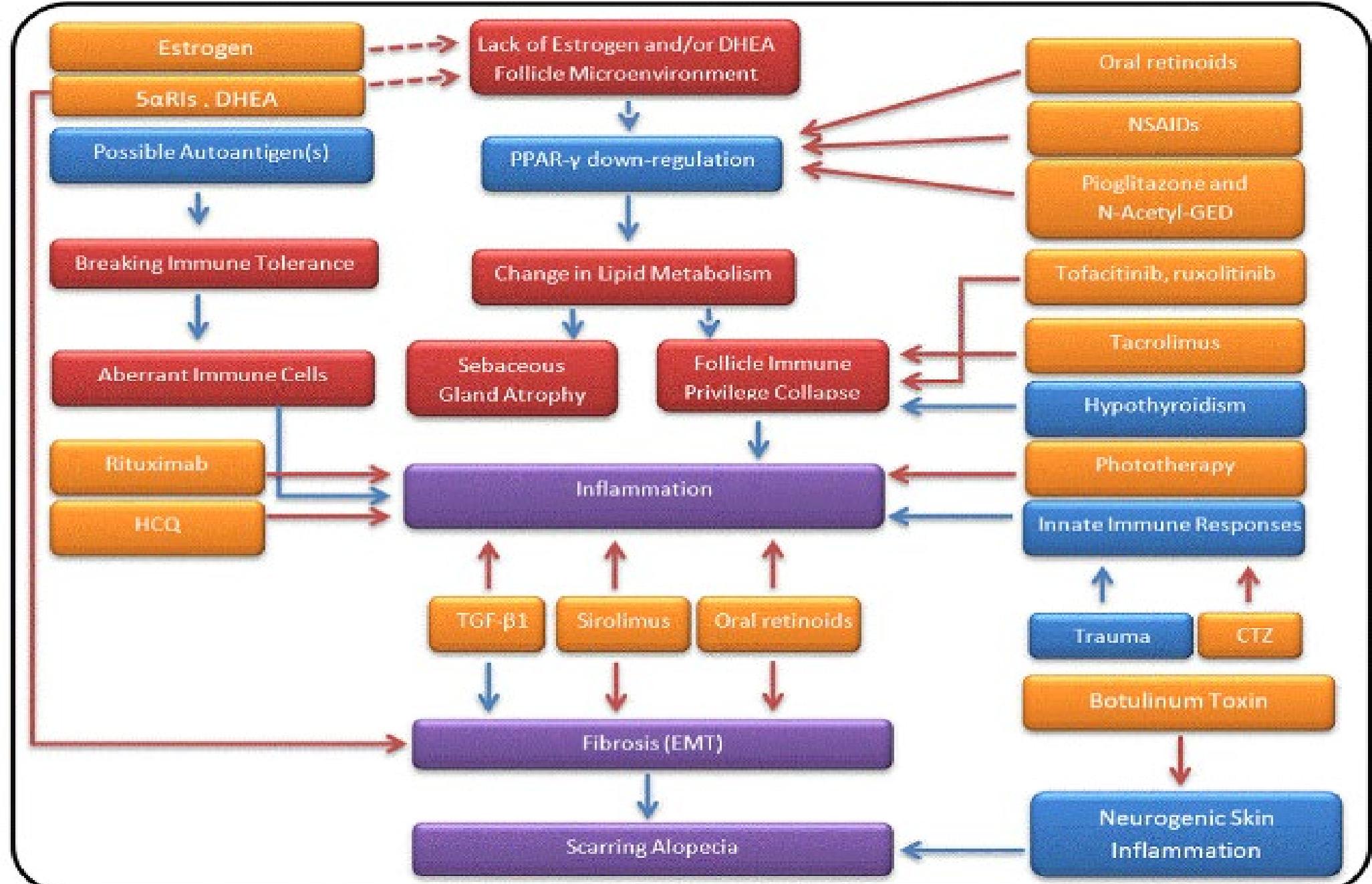
Menopausia temprana 14%.  
11-13% histerectomía.  
Deficiencia andrógenos 32%

Teoría genética?  
HLS? Mendeliano?

## Moleculares

Koebner?  
Disminución CK15.  
Aumento CMH I-II,  
IFNY y B2MG.

Alteración en PPARY  
TGF - B









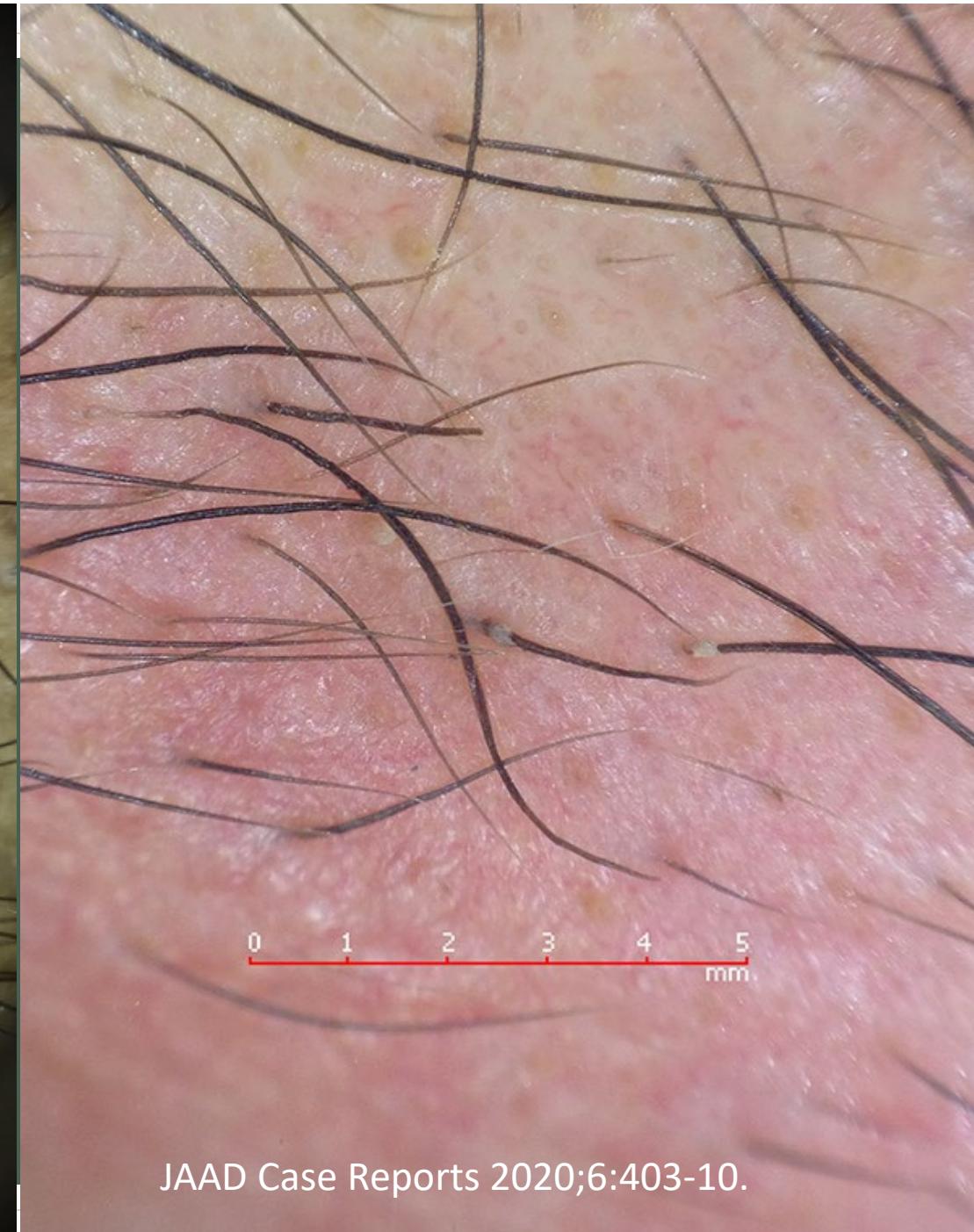
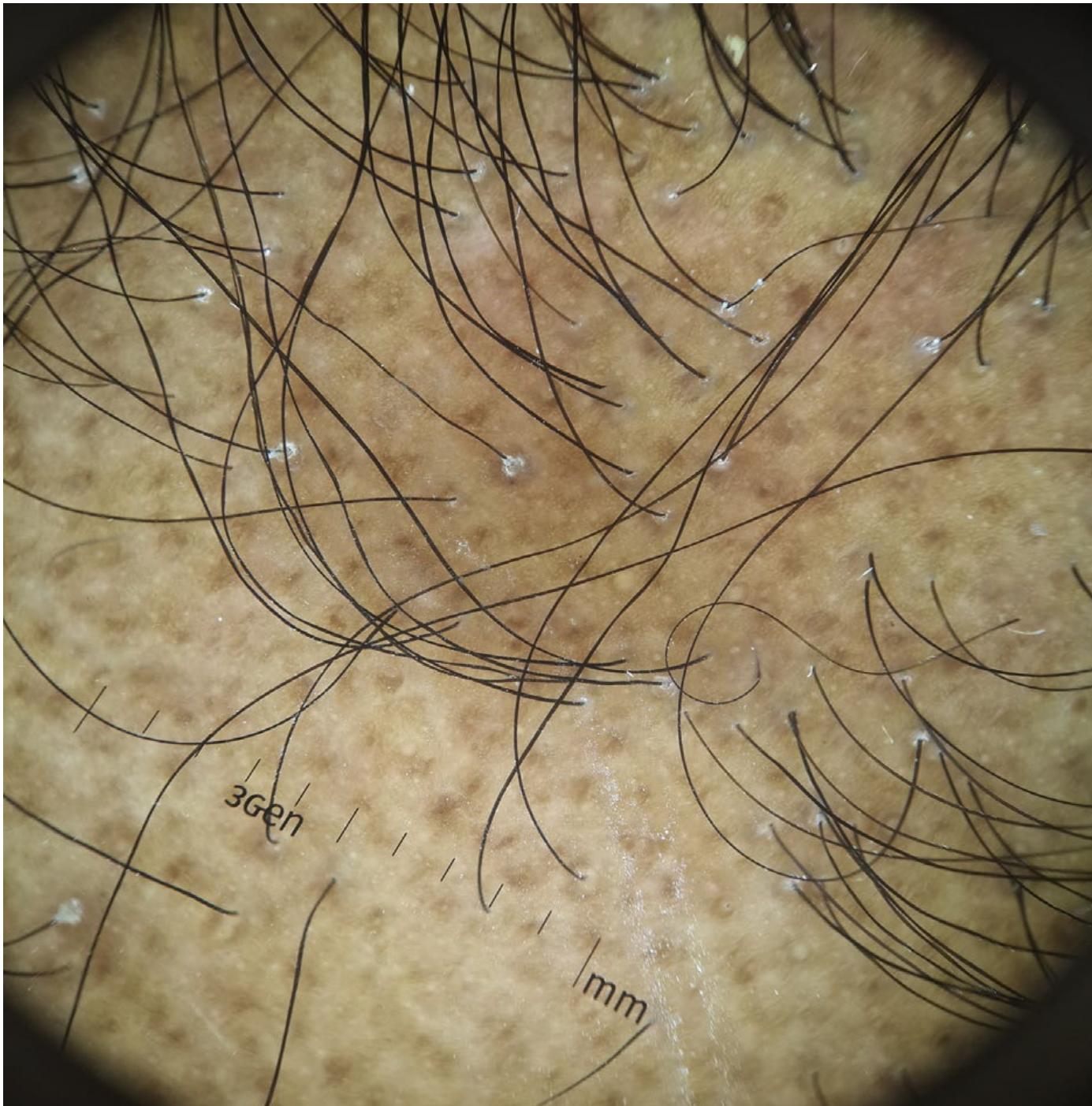


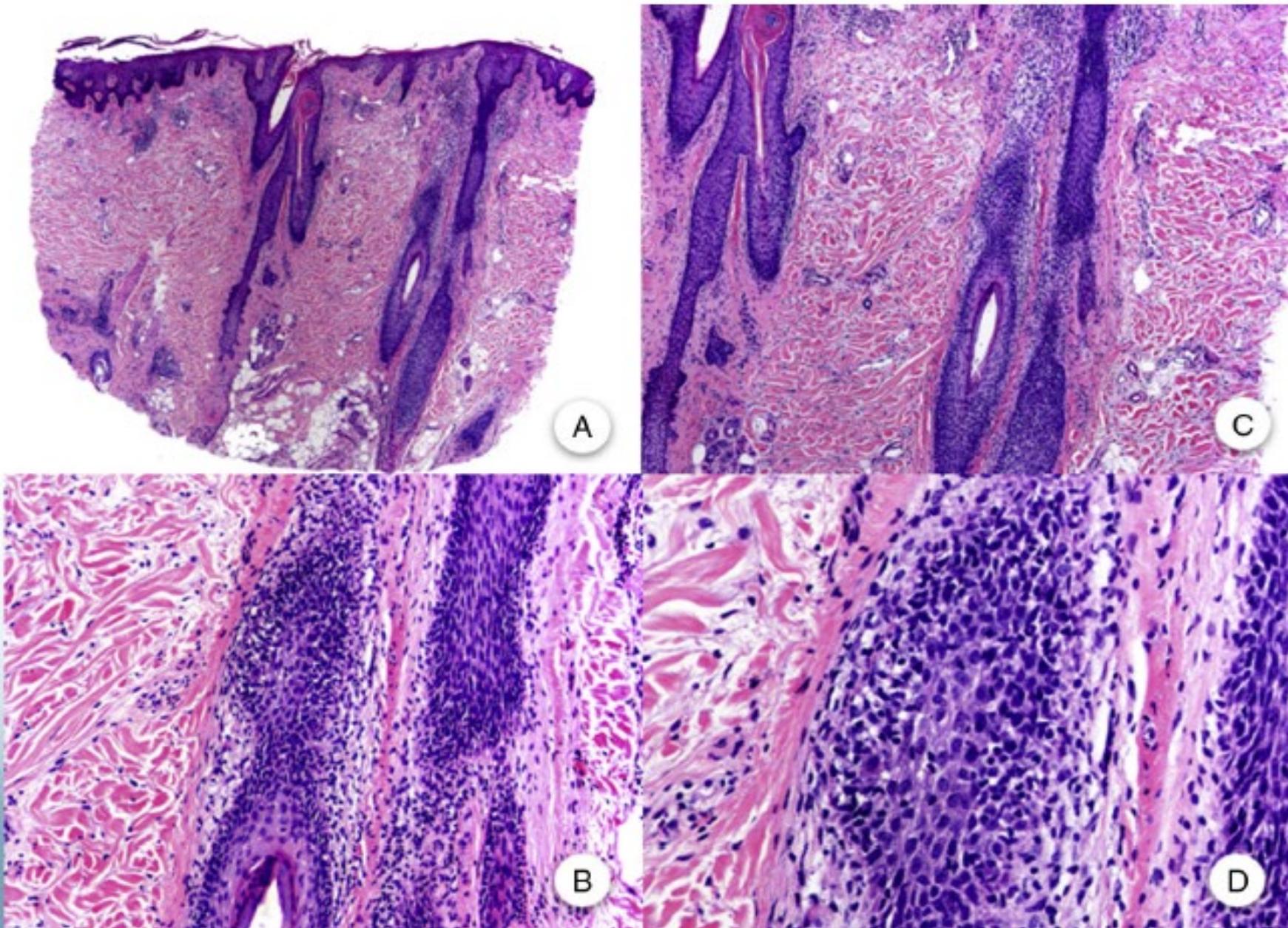














# ASPECTOS TERAPÉUTICOS

# Escala de severidad

**Table 2. Frontal Fibrosing Alopecia Scale of Severity.<sup>3</sup>**

<b>Grade of Severity</b>	<b>Distance From Receding Hairline to Original Noncicatricial Hairline, cm</b>
I	<1
II	1-2.99
III	3-4.99
IV	5-6.99
V	>7



# TERAPIAS TÓPICAS

Primary agent	Study type	Patients,		Duration	Response
		n	Treatment regimen		
No treatment	Retrospective cohort study <sup>30</sup>	6	None	-	86% (6/7) Stable at 2-yr follow-up
	Retrospective cohort study <sup>5</sup>	1	None	-	No improvement at 2-yr follow-up
Topical agents					53% (35/66)
Topical steroids	Retrospective cohort study <sup>9</sup>	9	Topical moderate potency steroids	-	No improvement
	Retrospective cohort study <sup>7</sup>	1	Topical steroids	-	Stabilized
	Retrospective cohort study <sup>22</sup>	48	Clobetasol propionate or betamethasone valerate tiw, pimecrolimus 1% cream tiw	20 mon	Improvement in 39.6% (19/48), stabilized in 25% (12/48), no improvement in 22.9% (11/48)
	Retrospective cohort study <sup>30</sup>	6	Topical clobetasol 0.05% solution daily	6 mon	Stabilized in 50% (3/6) at 2-yr follow-up

# Tacrolimus

Treatment	Study	No. of patients	Results
Topical calcineurin inhibitors	MacDonald et al <sup>11</sup> (2012)	22	Uncertain

# Minoxidil 2%

<b>Topical minoxidil</b>	<b>Cranwell et al<sup>31</sup> (2017)</b>	<b>1</b>	<b>Stabilization: 1</b>	<b>+ Dutasteride</b>
	<b>Tan and Messenger<sup>9</sup> (2009)</b>	<b>2</b>	<b>Stabilization: 2</b>	<b>+ Intralesional steroids</b>
	<b>Tosti et al<sup>72</sup> (2005)</b>	<b>8</b>	<b>Arrest of disease progression: 4 (50%)</b>	

- No hay datos claros.
- Limitación por ausencia de monoterapia.

# Esteroides intralesionales

Intralesional steroids				
	Banka et al <sup>10</sup> (2014)	57	Stabilization + reduction in symptoms: 55 (97%)	+ Topical clobetasol propionate 0.05%
	Moreno-Ramirez et al <sup>8</sup> (2005)	15	Stabilization: 14 (93%)	Dosage: 20 mg/mL every 3 months
	Vañó-Galván et al <sup>2</sup> (2014)	130	Improvement: 44 (34%) Stabilization: 64 (49%) Worsening: 6 (5%)	Mean of 8 injections per patient One injection every 3–6 months
	Donovan et al <sup>30</sup> (2015)	11	Complete response with hair regrowth in 10 patients at 3 and 6 month follow-up.	10 mg/mL

- Mayor efectividad en cejas.
- Lograr estabilización en cuero cabelludo.
- Mejoría de síntomas.

# Otras terapias

Imiquimod	Retrospective cohort study <sup>25</sup>	1	Imiquimod, class I steroid	40 mon	Improvement (nonspecific)
Interferon $\alpha$ -2b	Retrospective	1	Interferon $\alpha$ -2b	2 mon	No improvement
Sunscreen cessation	Case report <sup>34</sup>	1	Sunscreen cessation, dobelanol, intralesional TAC 5 mg/mL, dutasteride 0.1 mg/d, cyclosporine 25 mg/d	6 mon	100% (1/1) Regrowth

- Sin mejoría clara.



# TERAPIAS SISTÉMICAS

# Inhibidores de 5-a-Reductasa

Study design	No. of patients	Medication and course of treatment	Treatment response	Miscellaneous	Outcome from ACP grading
1) Single-centre, observational study. [Moreno-Arrones et al: J Eur Acad Dermatol Venereol. 2017.]	<ul style="list-style-type: none"> <li>• 106 women</li> <li>• Mean age 62.2 years (range 33-87)</li> <li>• Follow-up period: 1 year</li> </ul>	<ul style="list-style-type: none"> <li>• Dutasteride 0.5mg three times weekly.</li> <li>• Topical clobetasol propionate (0.05%) twice weekly</li> </ul>	<ul style="list-style-type: none"> <li>• Stabilised disease in 39 patients (37.3%).</li> <li>• The remaining patients had monthly recession on the frontal (0.6mm) and temporal (0.3mm) areas.</li> <li>• No regrowth of hair reported.</li> </ul>	N/A	Grade 2
2) Case report. [Cranwell et al: Australas J Dermatol 2016.]	<ul style="list-style-type: none"> <li>• One premenopausal woman, familial variant.</li> </ul>	<ul style="list-style-type: none"> <li>• Dutasteride 0.5mg daily and Minoxidil 1mg daily for 3 years.</li> </ul>	<ul style="list-style-type: none"> <li>• Stabilised disease.</li> <li>• No regrowth of hair reported.</li> </ul>	<ul style="list-style-type: none"> <li>• Patient also on MTX and HCQ for rheumatoid arthritis.</li> </ul>	Grade 4
3) Case report. [Donovan JC: JAAD Case Rep 2015.]	<ul style="list-style-type: none"> <li>• One post-menopausal woman.</li> </ul>	<ul style="list-style-type: none"> <li>• Finasteride 2.5mg daily for 1 year.</li> </ul>	<ul style="list-style-type: none"> <li>• Reduced redness and reversed skin atrophy.</li> <li>• Hair regrowth on scalp reported.</li> </ul>	N/A	Grade 4
4) Multicentre observational study. [Vano-Galvan et al: J Am Acad Dermatol. 2014.]	<ul style="list-style-type: none"> <li>• 18 patients of dutasteride.</li> <li>• 102 patients on finasteride.</li> <li>• Follow-up period: 2.1 years (range 0.4-19 years)</li> </ul>	<ul style="list-style-type: none"> <li>• Dutasteride 0.5mg once weekly.</li> <li>• Finasteride 2.5-5mg daily.</li> </ul>	<ul style="list-style-type: none"> <li>• Dutasteride: Disease improved in 8(44.4%) patients and stabilized in 10(55.6%) patients. (single and combination therapy)</li> <li>• Finasteride: Disease improved in 48(47%) patients and stabilized in 54(52.9%) patients. (single and combination therapy)</li> <li>• Patients on monotherapy: stabilization reported in 19(67.9%) patients.</li> <li>• Minimal hair regrowth reported around hairline in 9(32.1%) patients.</li> </ul>	<ul style="list-style-type: none"> <li>• AGA was absent in 30(27%) patients.</li> <li>• SARI was used as monotherapy in 10(33%) of these patients with good response.</li> </ul>	Grade 2
5) Case series. [Ladizinski et al: J Am Acad Dermatol 2013.]	<ul style="list-style-type: none"> <li>• 10 patients on dutasteride,</li> <li>• 5 patients on monotherapy.</li> <li>• 3 patients on finasteride, 1 patient on monotherapy.</li> </ul>	<ul style="list-style-type: none"> <li>• Dutasteride 0.5mg daily. Mean duration of 30 months (15-44 mths)</li> <li>• Finasteride 2.5mg daily</li> <li>• Mean duration of 10 months (3-20 mths)</li> </ul>	<ul style="list-style-type: none"> <li>• Dutasteride: Disease stabilised in 4(40%) patients on monotherapy, 3(30%) patients on combination therapy.</li> <li>• Finasteride: Disease stabilised in 1(33%) patients who was on monotherapy.</li> <li>• No regrowth of hair reported.</li> </ul>	N/A	Grade 3

# Retinoides sistémicos

Systemic retinoids	Retrospective cohort study <sup>29</sup>	29	Isotretinoin 20 mg/d	12-16 mon	Stabilized after 12 mon in 79% (23/29)
	Retrospective cohort study <sup>30</sup>	11	Acitretin 20 mg/d	12-16 mon	Stabilized after 12 mon in 73% (8/11)
	Retrospective cohort study <sup>25</sup>	1	Isotretinoin 50 mg/d	2 mon	No improvement
		1	Acitretin	4 mon	No improvement
		1	Acitretin, finasteride 1-2.5 mg/d, topical imiquimod	20 mon	No improvement

# Tetraciclinas

<b>Oral tetracyclines</b>	<b>Ladizinski et al<sup>4</sup> (2013)</b> <b>Samrao et al<sup>12</sup> (2010)</b> <b>Banka et al<sup>10</sup> (2014)</b>	<b>3</b> <b>4</b> <b>13</b>	<b>Stabilization: 2</b> <b>At 6-month follow-up: response: 1</b> <b>Partial response: 1</b> <b>No response: 2</b> <b>Stabilization: 13 (100%)</b>	<b>Doxycycline + Dutasteride</b> <b>Doxycycline</b> <b>Doxycycline 100 mg twice daily or tetracycline 500 mg twice daily</b>
---------------------------	---	-----------------------------------	---	--

- Lograr estabilización.
- No se ha logrado establecer dosis.
- Efectos adversos pueden limitar su uso.
- No monoterapia.
- Banka: más esteroides intralesionales.

# Agentes inmunosupresores

Immunosuppressants					
Systemic steroids	Retrospective cohort study <sup>9</sup>	4	Prednisone 25-50 mg/d	1 mon	33% (4/12) Temporarily slowed rapid hair loss in 50% (2/4)
	Retrospective cohort study <sup>14</sup>	3	Intramuscular TAC 40 mg q3w, topical minoxidil	-	Slowly progressive
	Retrospective cohort study <sup>30</sup>	1	Methylprednisolone 16 mg/d	1 mon	Stable
Methotrexate	Retrospective cohort study <sup>25</sup>	2	Methotrexate 15-25 mg/wk	13-19 mon	Stabilized in 50% (1/2)
		1	Methotrexate 15-25 mg/wk, finasteride 1-2.5 mg/d	16 mon	No improvement
Azathioprine	Retrospective cohort study <sup>25</sup>	1	Azathioprine	4 mon	No improvement

# Hidroxicloroquina

Anti-inflammatory				
HCQ	Retrospective cohort study <sup>25</sup>	2	HCQ 400 mg/d	10-42 mon 69% (45/65) Stabilized
		1	HCQ 400 mg/d, tacrolimus, class I steroid	18 mon No improvement
		1	HCQ 400 mg/d, class I steroid	7 mon No improvement
	Retrospective cohort study <sup>24</sup>	54	HCQ 200-400 mg/d with nonspecific therapies	- Regrowth in 15% (8/54), stabilized in 59% (32/54), no improvement in 22% (12/54), results unavailable in 4% (2/54)
	Retrospective cohort study <sup>7</sup>	1	HCQ, clobetasol	1 yr Stabilized
		1	HCQ, intralesional TAC	- No improvement

# Otras terapias

PPAR- $\gamma$ agonist					
Pioglitazone	Retrospective cohort study <sup>31</sup>	4	Pioglitazone 15 mg/d	10 mon	60% (3/5) Regrowth in 75% (3/4)
	Retrospective cohort study <sup>25</sup>	1	Pioglitazone	8 mon	No improvement
Griseofulvin	Retrospective cohort study <sup>9</sup>	1	Griseofulvin 330 mg/d	1 mon	No improvement
Naltrexone	Retrospective cohort study <sup>33</sup>	1	Naltrexone 3 mg/d, pioglitazone 15 mg/d, finasteride 5 mg/d, doxycycline 100 mg bid	1 mon	Stable



# INTERVENCIONES

# Excimer

Excimer laser	Navarini et al <sup>74</sup> (2011)	13 with LPP	Significant reduction in clinical signs of inflammation	Frequency: twice/week Cumulative mean dosage: 4300 mJ/cm Average of 10 excimer laser treatments
	Vavricka et al <sup>75</sup> (2006)	13 with LPP	Positive response in all 3 patients—2 with hair growth and 1 with decreased pruritis	

- Terapia prometedora.
- Corta evidencia.
- No RCT.

# Trasplante capilar

## Outcomes of Hair Transplantation in 15 Patients with FFA or LPP.

	Positive Outcome n (%)	Negative Outcome n (%)	
Total	7 (47%)	8 (53%)	
Frontal Fibrosing Alopecia	2 (29%)	5 (71%)	P = .132



# COMPROMISO CEJAS

Primary agent	Study type	Patients, n	Treatment regimen	Duration, mon	Outcomes
Topical steroids	Retrospective cohort study <sup>22</sup>	48	Clobetasol propionate or betamethasone valerate tiw, pimecrolimus 1% cream tiw	20	Symptoms: resolved pruritis in 44% (11/25), improvement of trichodynbia in 33% (1/3)
Intralesional steroids	Retrospective cohort study <sup>23</sup>	11	Intralesional triamcinolone acetonide 10 mg/mL x 0.125 mL/eyebrow, systemic therapy	1-72	Eyebrow regrowth in 91% (10/11) after 3-6 mon
HQQ	Retrospective cohort study <sup>8</sup>	16	HQQ	12	LPPAI at 6 mon: 27% (4/15) responders, 47% (7/15) partial responders, 27% (4/15) nonresponders; LPPAI at 12 mon: 56% (5/9) responders, 33% (3/9) partial responders, <25% reduction in 11% (1/9) nonresponders
HQQ	Retrospective cohort study <sup>20</sup>	7	HQQ 200 mg bid	12	LPPAI at 6 mon: 14% (1/7) responders, 57% (5/7) partial responders, 29% (2/7) nonresponders; LPPAI at 12 mon: 57% (4/7) responders, 29% (2/7) partial responders, 14% (1/7) nonresponders

Doxycycline	Retrospective cohort study <sup>26</sup>	4	Doxycycline	18	LPPAI at 6 mon: 25% (1/4) responders, 25% (1/4) partial responders, 50% (2/4) nonresponders; LPPAI at 12 mon: 33% (1/3) responders, 33% (1/3) partial responders, 33% (1/3) nonresponders
Finasteride	Case report <sup>28</sup>	1	Finasteride 2.5 mg/d	3	Signs: reduction in redness, reversal of skin atrophy
Dutasteride	Prospective cohort study <sup>27</sup>	13	Dutasteride 0.5 mg/d	12	Eye brows regrowth in 71% (5/7)
Dutasteride	Case report <sup>29</sup>	1	Dutasteride 0.5 mg/d, pimecrolimus 1% cream bid	6	Eye brows restored; axillae regrowth
Mycophenolate mofetil	Retrospective cohort study <sup>26</sup>	5	Mycophenolate mofetil	6	LPPAI at 6 mon: 20% (1/5) responders, 40% (2/5) partial responders, 40% (2/5) nonresponders; LPPAI at 12 mon: 100% (1/1) nonresponders



# ALGORITMO TERAPÉUTICO

