

2025
AEDV
Highlights

34ª edición
17-20 sep
PARÍS

Brilla el futuro de *la dermatología*,
donde nace *la luz*

■ Título: Hidradenitis Suppurativa

Sonsoles Berenguer Ruiz

Hospital Universitario La Princesa



2025

AEDV Highlights

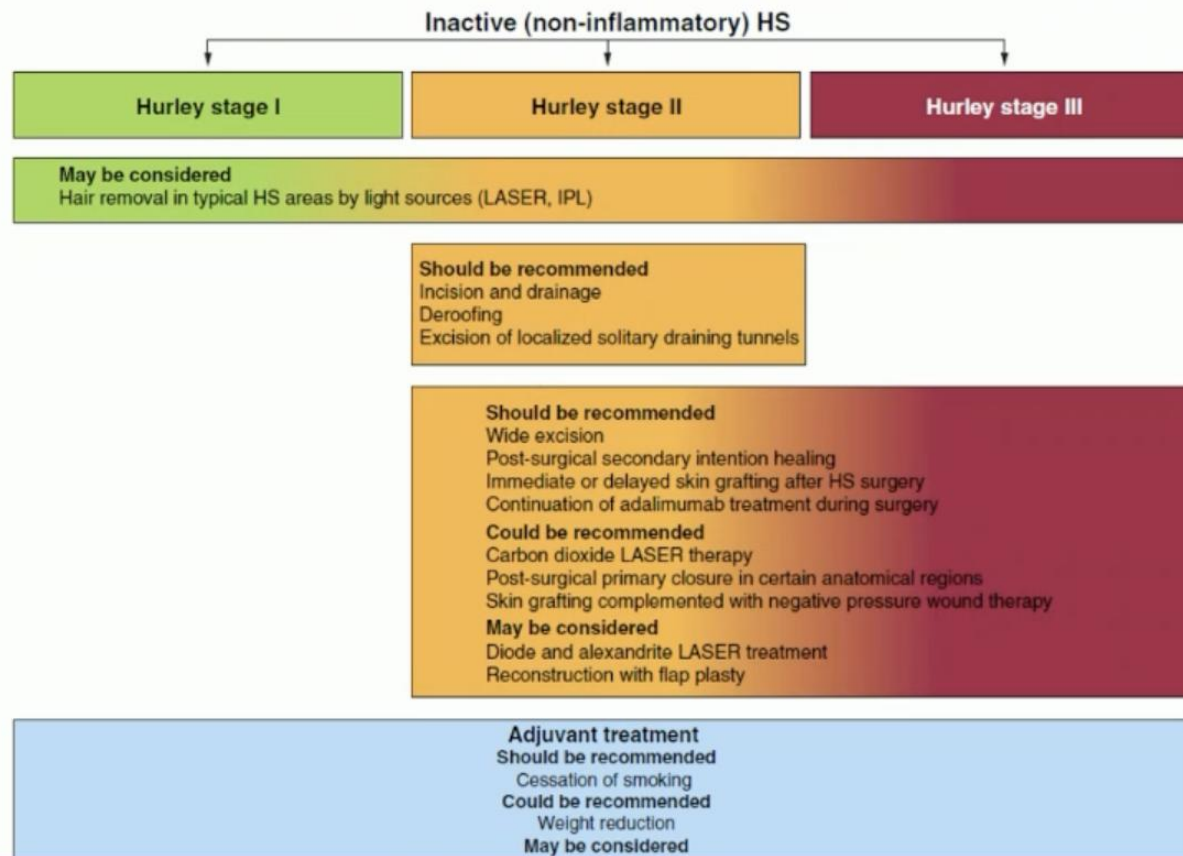
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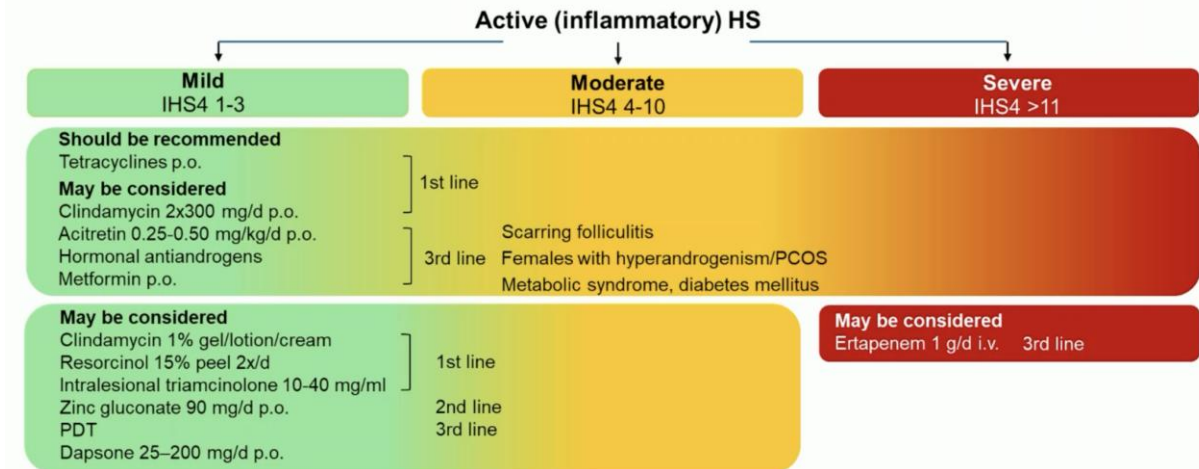
**NO TENGO CONFLICTOS
DE INTERÉS**



Treatment algorithm for inactive (non-inflammatory) HS

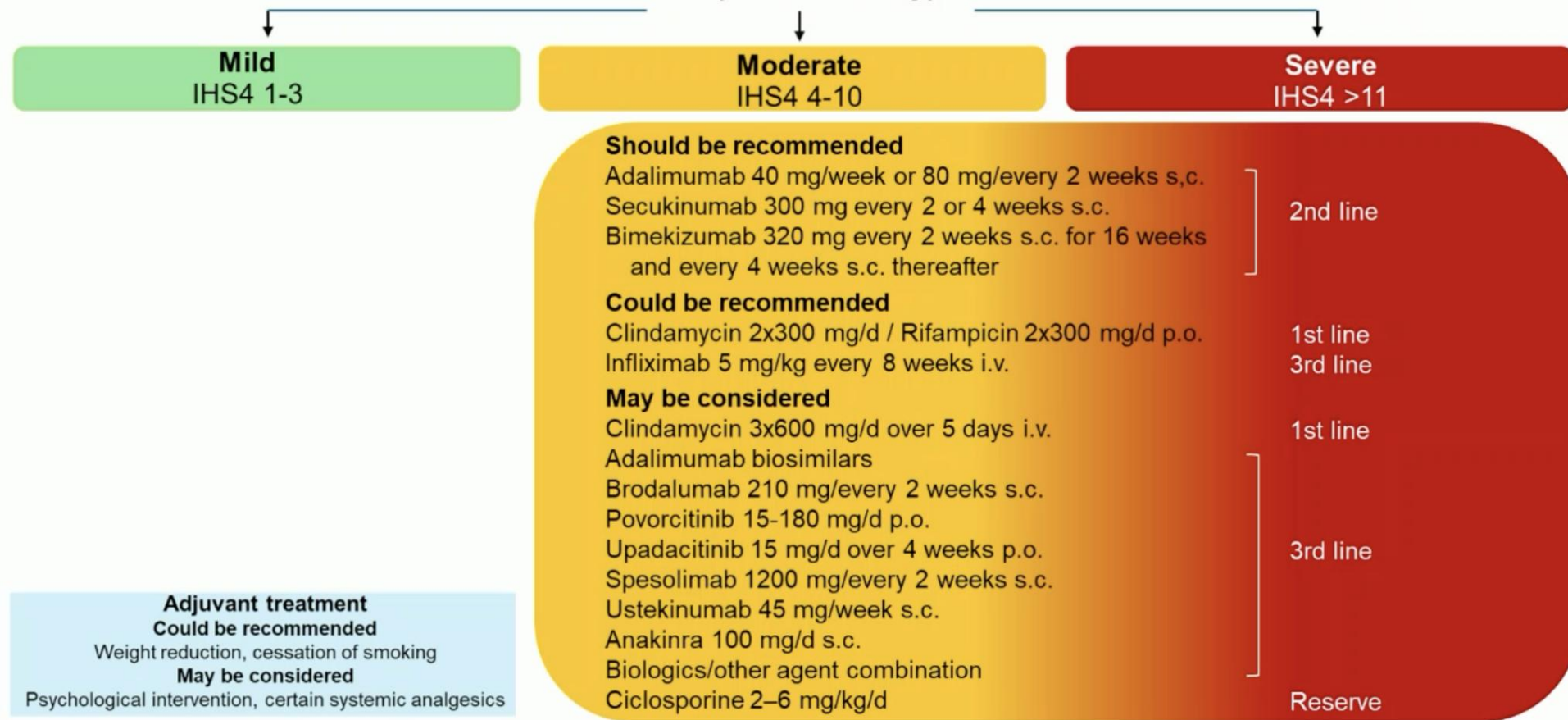


European guidelines 2025



European guidelines 2025

Active (inflammatory) HS



- Mantenimiento del tratamiento biológico previo a la cirugía

ANTI-INFLAMMATORY THERAPY MAY HELP OPTIMISE CONDITIONS FOR SURGERY



- Reduce inflammation – potential to better define surgical margin
- Lower edema, swelling, etc.



- Reduce flare after surgery
- Effective therapy for wider lesions (beyond surgery site)



- Good safety profile – does not interfere with surgery or its outcomes

Surgery improves biologic therapy outcomes

Adalimumab in conjunction with surgery compared with adalimumab monotherapy for hidradenitis suppurativa: A Randomized Controlled Trial in a real-world setting

Objective: To compare the clinical effectiveness of adalimumab combined with surgery vs adalimumab monotherapy in patients with moderate to severe hidradenitis suppurativa.

Results: Thirty-one patients were included per arm

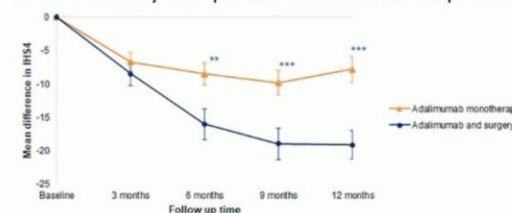


Fig 2. The difference in International Hidradenitis Suppurativa Severity Score System over time. Illustrated in mean with SE. ** $P < .01$ *** $P < .001$. IHS4, International Hidradenitis Suppurativa Severity Score System.

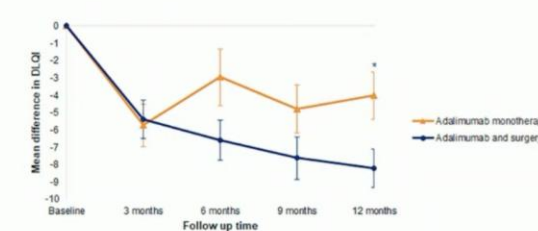


Fig 3. The difference in change in Dermatology Life Quality Index over time. Illustrated in mean with SE. * $P < .05$. DLQI, Dermatology Life Quality Index.

Aarts P, van Huijstee JC, van der Zee HH, van Doorn MBA, van Straalen KB, Prens EP. Adalimumab in conjunction with surgery compared with adalimumab monotherapy for hidradenitis suppurativa: A Randomized Controlled Trial in a real-world setting. *J Am Acad Dermatol*. 2023 Oct;89(4):677-684. doi: 10.1016/j.jaad.2023.04.034. Epub 2023 Apr 27. PMID: 37116615.

Dr Martorell. Hospital de Manises

Secukinumab and surgical safety

Effectiveness and safety of secukinumab in combination with surgery in the treatment of Hidradenitis Suppurativa (HS) in clinical practice



Sofía Moreno¹, Antonio Martorell², Cristina Ciudad-Blanco³, Irene Sánchez⁴, Fernando Alfageme⁵, Sofía Haselgruber⁶, Alejandro Molina-Leyva⁷, Rosa Fornons⁸, Verónica Mora⁹, Helena Escaló¹⁰, Gemma Martí¹¹, Rafael Fayos¹², Begoña Escutia¹³, Patricia Garbayo-Salmons¹⁴, Inés Gracia-Darder¹⁵, Joan Garcías¹⁶, Joan Aguiar¹⁷, Sonia de la Fuente¹⁸, José Carlos Pascual¹⁹, Emili Masferrer²⁰, Oriol Corral²¹, Carolina Fernández Quiroga²², Pablo Fernández-Crehuet²³, Joan Ceravalls²⁴, Javier Melgosa²⁵, Pedro Navarro²⁶, Eva Vilarrasa²⁷

On behalf of the Spanish Group of Hidradenitis Suppurativa.

¹Sant Pau Hospital, ²Manises Hospital, ³Gregorio Marañón Hospital, ⁴Puerto de Hierro Hospital, ⁵Virgen de las Nieves Hospital, ⁶Beilvitge Hospital, ⁷Germans Trias i Pujol Hospital, ⁸Hospital del Mar, ⁹La Fe Hospital, ¹⁰Parc Taulí Hospital, ¹¹Son Espases Hospital, ¹²Arnau de Vilanova Hospital, ¹³Lezama Blesa Hospital, ¹⁴General University Hospital of Alicante, ¹⁵Mutua Terrassa

Table 3. Results in effectiveness and safety in intervened group

Time from start of secukinumab until surgery, months, median (IQR) *data for 84 interventions	7 (4-11)
Pre-surgical IHS4, average $\pm$ SD *data for 97 interventions	10.77 $\pm$ 7.18
Post-surgical IHS4, average $\pm$ SD *data for 92 interventions	5.29 $\pm$ 5.90
Time until complete healing, days, average $\pm$ SD *data for 80 interventions	37.54 $\pm$ 19.16
Patient satisfaction, VAS, average $\pm$ SD *data for 45 interventions	6.53 $\pm$ 2.88
Local recurrence, n (%) *data for 97 interventions	12 (12.37%)
Time from surgery until recurrence, months, average $\pm$ SD	5.7 $\pm$ 4.76
Adverse events, n (%) *data for 100 interventions	20 (20.00%)
Follow-up time, months, median (IQR) *data for 89 interventions	10 (4-18)

In our series, the intervention carried out was a surgical procedure. There were no character- Twenty: adjuvant wound care. Likewise, patient satisfaction

P0100 High efficacy and safety of Bimekizumab combined with surgery for hidradenitis suppurativa: Findings from a multicentric study

Eva Vilarrasa¹, Miguel Mansilla-Polo^{2,3}, Carmen García-Morante⁴, Pablo Fernández-Crehuet⁵, Patricia Garbayo-Salmons⁶, Martí Pons-Benavent⁷, Lucile Aguilar-González⁸, David Jiménez-Gallo⁹, Rebecca Alcala-García¹⁰, Gemma Martín-Ezquerro¹¹, Antonio Martorell¹², Laura Mahiques-Santos¹³, Fernando Ailagema¹⁴, Begoña Escutia-Muñoz¹⁵, Antonio Sahuquillo-Torres^{16,17}, Rafael Fayos-Gregori^{18,19}, Alberto Soto-Moreno²⁰, Irene Sánchez-Gutiérrez²¹, Rafael Botella-Estrada^{22,23}, Alejandro Molina-Leyva²⁴

¹Centro de Investigación y Desarrollo en Dermatología, ²Unidad de Hidradenitis Suppurativa, ³Unidad de Hidradenitis Suppurativa, ⁴Unidad de Hidradenitis Suppurativa, ⁵Unidad de Hidradenitis Suppurativa, ⁶Unidad de Hidradenitis Suppurativa, ⁷Unidad de Hidradenitis Suppurativa, ⁸Unidad de Hidradenitis Suppurativa, ⁹Unidad de Hidradenitis Suppurativa, ¹⁰Unidad de Hidradenitis Suppurativa, ¹¹Unidad de Hidradenitis Suppurativa, ¹²Unidad de Hidradenitis Suppurativa, ¹³Unidad de Hidradenitis Suppurativa, ¹⁴Unidad de Hidradenitis Suppurativa, ¹⁵Unidad de Hidradenitis Suppurativa, ¹⁶Unidad de Hidradenitis Suppurativa, ¹⁷Unidad de Hidradenitis Suppurativa, ¹⁸Unidad de Hidradenitis Suppurativa, ¹⁹Unidad de Hidradenitis Suppurativa, ²⁰Unidad de Hidradenitis Suppurativa, ²¹Unidad de Hidradenitis Suppurativa, ²²Unidad de Hidradenitis Suppurativa, ²³Unidad de Hidradenitis Suppurativa, ²⁴Unidad de Hidradenitis Suppurativa

*On behalf of the Spanish Hidradenitis Suppurativa group (SHS)

Introduction: Hidradenitis suppurativa may involve extensive tunneling and permanent scarring that may require surgical intervention. Combined approach with surgery is therefore sometimes required. To date, no studies have assessed the real-world effectiveness and safety of bimekizumab combined with surgery for hidradenitis suppurativa (HS). This study primarily aims to evaluate the clinical efficacy and safety of bimekizumab in surgical management of HS. In addition, it is intended to observe whether there are baseline differences between operated and non-operated patients

Methods: Retrospective multicenter study, involving 12 Spanish hospitals with a follow-up period of 48 weeks. Adult HS patients receiving bimekizumab who underwent surgical intervention were retrospectively reviewed.

Results: A total of 78 patients were included. At baseline, mean age (SD) of the whole cohort was 48.52 (13.7) years, the female-to-male ratio was 15:24, mean BMI was 28.7 (3.2). Hurley stage III was present in 60% of patients and the mean baseline IHS4 score was 24.14 (13.51). Thirty-five surgeries were carried out in 34 patients after a median (IQR) of 20.1 months (2-10.5) of bimekizumab therapy. All interventions were performed on tunnels: wide excision in 13 (37.1%) as derofect or STEEP in 22 (62.8%). Lesions were mainly placed in the axilla (14, 40%), inguino-genital area (13, 37.1%) and buttocks (8, 22.8%). Biological therapy was maintained during the surgical procedure in all cases (100%). Mean post-surgical IHS4 decreased from 23.04 (2.8) to 5.9 (1.8) $p < 0.001$ among the intervened patients at week 48 (as observed data). Reported adverse events associated with surgery were uncommon (5, 14.2%), including pain (5, 14.2%) and post-operative bleeding (3, 8.5%). Likewise, local recurrences were infrequent (2, 5.7%). No cases of local infection were observed. Mean wound healing time was 3.2 weeks at patient satisfaction with surgery was 6.8 (VAS scale). There were no significant differences between the intervened and non-intervened groups regarding baseline characteristics except for BMI: percentage of obese patients was statistically higher in operated patients than in non-operated patients (81.8% vs 58.9% respectively, $p = 0.02$). In terms of baseline disease severity, patients who underwent surgery showed a higher percentage of Hurley III, compared to those who did not (76.92% vs 52.94%, $p = 0.04$). Likewise, the number of previous systemic treatments was also higher among patients that required surgery: 2.05 (0.17) vs 1.1 (0.27), respectively, $p = 0.003$. Both groups showed a marked decrease in IHS4 after 48 weeks of bimekizumab treatment: Baseline IHS4 was 24.5 (1.8) in bimekizumab monotherapy group ($n = 56$) vs 23 (2.8) in bimekizumab combined with surgery ($n = 22$), $p = 2.51$. At 48-week, mean IHS4 was 7 (1.2) vs 5.9 (1.8), $p = 0.21$, respectively (as observed data). No differential adverse events were reported in either group.

Conclusion: Bimekizumab demonstrates remarkable efficacy and safety in the treatment of hidradenitis in clinical practice. The use of combined surgical approach is common in this setting and offers greater effectiveness, together with a good safety profile and an adequate postoperative wound healing process.



Bimekizumab and surgical safety

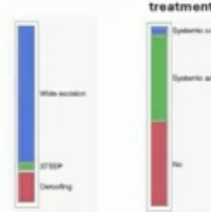
Hurley stage at the surgical site



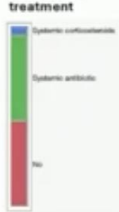
Time to complete wound healing



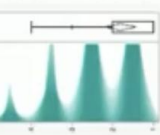
Type of procedure



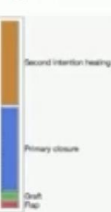
Surgical adjuvant treatment



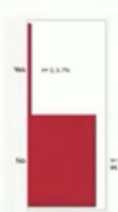
Nº lesions in the surgical area



Type of closure



Surgical recurrence



Excised area (cm2)



Satisfaction with the surgical procedure (VAS)



CONCLUSIONS

- The combination of secukinumab with surgery in clinical practice can ensure an adequate postoperative wound healing process.
- Both adverse effects and local recurrences were few, and patient satisfaction was high.

La ecografía puede reducir las recurrencias tras la cirugía

Resonancia magnética

The integration of ultrasound-guided margins in HS surgery offers a promising opportunity for improving clinical outcomes

Study design

Prospective study involving consecutive patients who underwent surgical intervention at the hospital of Manises
Perioperative ultrasound assessments were employed to precisely delineate the surgical margins for HS lesions
The primary outcome was the evaluation of the recurrence rates over a minimum follow-up period of 1 year

Characteristics	
Surgical procedures	N = 110
Sex (male/female)	N = 70 / N = 42
Average age (years)	43,22
Lesions	
Axillary	N = 35 (median size 8,18 cm x 4,46 cm)
Groin	N = 36 (median size 8,48 cm x 4,84 cm)
Genital	N = 2 (median size 5,65 cm x 5,60 cm)
Gluteal	N = 30 (median size 16,49 cm x 6,81 cm)
Abdominal	N = 9 (median size 20,31 cm x 7,35 cm)

Ultrasound-guided surgery can reduce the recurrence rate in HS surgeries

100% no recurrence in a mean follow-up of 22,23 months

MARGINS PRECISION IN ULTRASOUND-GUIDED SURGERY				
Location	Recommended clinical margin*	Mean Ultrasound margins	Mean skin resected using Ultrasound guided surgery	% spared normal tissue with pre-surgical US
Axillary fold	2 cm	1.20 cm	0.8 cm	40%
Scrotal fold	2 cm	1.10 cm	0.9 cm	45%
Gluteal fold	2 cm	1.25 cm	0.75 cm	37,5%
Genital	4 cm	2.7 cm	1.3 cm	32,5%
Other areas	3 cm	1.9 cm	1.1 cm	36,6%

*Recommendations based on clinical-US analysis of HS free margins performed in the present study
**Other areas include cervical and abdominal surgeries

The adoption of surgical techniques with controlled margins as the ultrasound-guided surgery becomes imperative to minimize recurrence rates while preserving the maximum amount of normal skin tissue, offering the best aesthetic result

Poster 237. Martorell A. et al. Clinical precision in hidradenitis suppurativa lesion excision: a prospective study of 110 cases utilizing ultrasound-guided surgical techniques. Presented at the 13th Conference of the European Hidradenitis Suppurativa Foundation e V (EHSF), Lyon, France, 07-09 February, 2024.

Consider MRI...

Placas marronáceas induradas



Pruebas de imagen: Elastografía

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El objetivo de este trabajo fue evaluar a **41 pacientes con hidrosadenitis supurativa** mediante elastografía. Objetivo: comprar la rigidez del trayecto fistuloso con respecto a un área control adyacente y analizar cómo estos hallazgos se relacionan con las características clínicas

EA
DV CONGRESS

Material - Method

- USG assessment: Lesion size, Echogenicity, Stiffness were evaluated.
- Comprasion: fistula tract vs adjacent control area were analyzed.
- Also ΔkPa is defined as the difference between fistula and the control tissues stiffness values was calculated
- Association between elastographic findings - clinical features



Ultrasound: Mindray Resona R9, China with a 15–3 MHz high-resolution

3 Radiologist

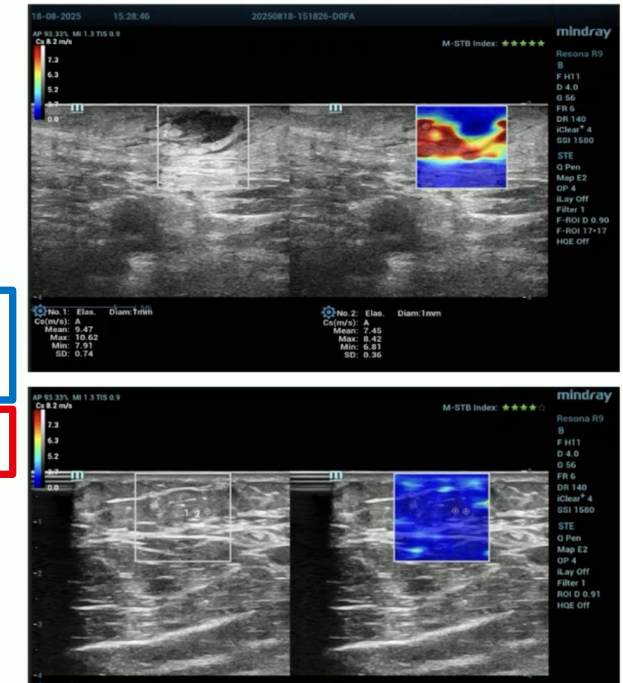


EA
DV CONGRESS

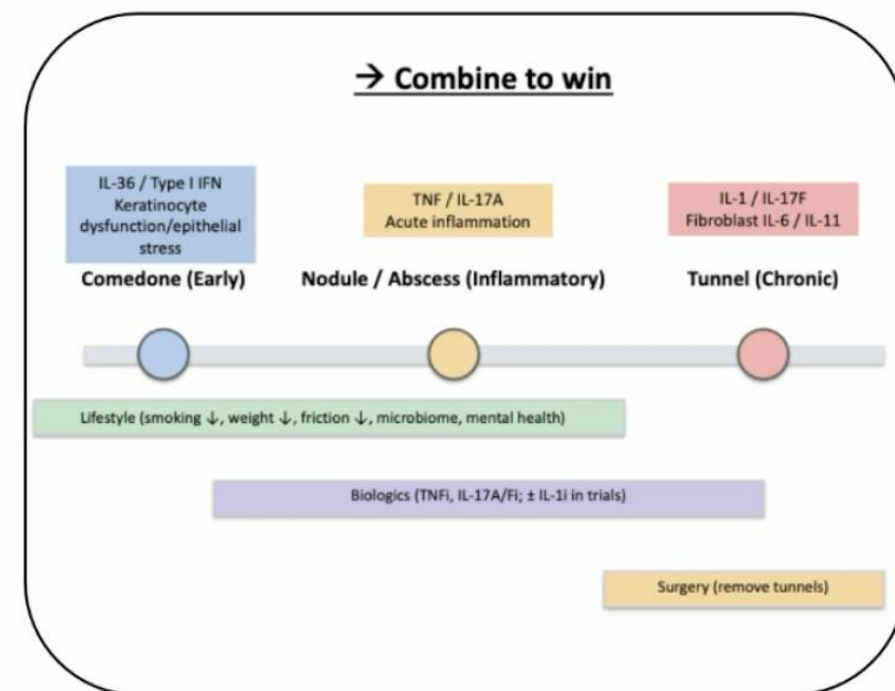
Results N=41 pacientes

- The **median fistula stiffness** was **64.2 kPa** vs **control 21.8 kPa** -> **significantly higher** ($p < 0.001$)
- No correlation with disease severity (IHS-4, Hurley) (all $p > 0.05$)
- No effect of biologic therapy on stiffness ($p > 0.05$)
- No differences across anatomical locations ($p > 0.05$)

• La elastografía refleja una característica propia del tejido fistuloso, independiente de estos factores



- **HS progression is structural:** once tunnels form, damage is hard to reverse.
- **Current biologics ≠ cure:** they reduce inflammation and shrink tunnels, but **tunnels persist**
- **True disease modification = tunnel prevention** (not just flare control)
- **Early matters (hypothesis):** intervening **before** tunnels likely improves outcomes - needs prospective proof
 - Clinical improvement
 - Tunnel prevention
 - Molecular studies ++++
 - Prevent ? Identify population at risk ?
- **Beyond inflammation:** target **keratinocyte dysfunction** and **fibroblasts**
- **Combine to win: Biologic + surgery + holistic care** (smoking cessation, weight, friction, microbiome, mental health)



Modificación de enfermedad

Hit strong – Hit early: evidence ?

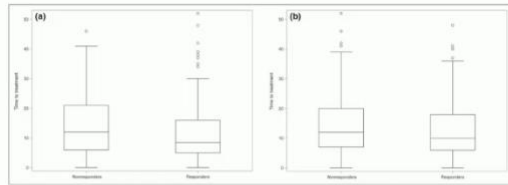


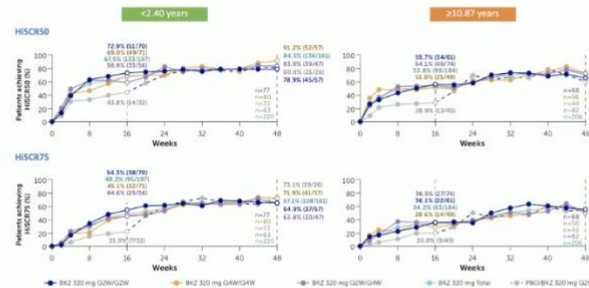
Figure 1 Box plot summarizing the distribution of time to treatment for responders and nonresponders (clinical response assessed using the Hidradenoma Inflammatory Clinical Response). (a) Response at week 16; (b) response at week 52. The horizontal line within the box represents the median value for time to treatment; the upper horizontal line of the box represents the 3rd quartile (Q3); the lower horizontal line of the box represents the 1st quartile (Q1). Upper fence is Q3 + 1.5 interquartile range; lower fence is the minimum observed value. Dots represent outliers.

- **HS patients with shorter disease duration are associated with increased rates of positive responders**

- Adalimumab
- Secukinumab
- Bimekizumab

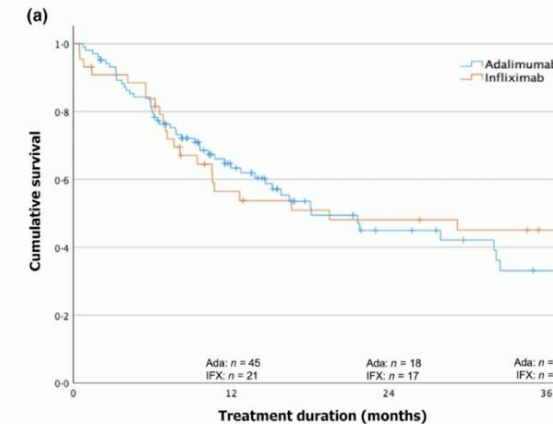
- **Limitations**

- Indirect data
- No pathogenesis link to date
- Which target ?



Marzano et al. Br J Dermatol. 2021
Haselgruber et al. Dermatol Ther. 2024
Martorell A et al. Actas Dermosifiliogr. 2016

Limited drug survival of biologics reflects ongoing disease progression despite treatment



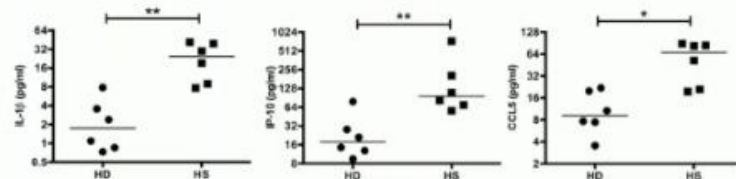
Prens LM et al. Brit J Dermatol 2021

Inflammation is slowed, but progression continues

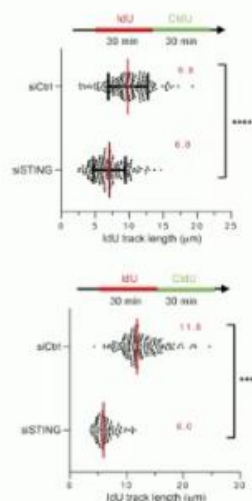
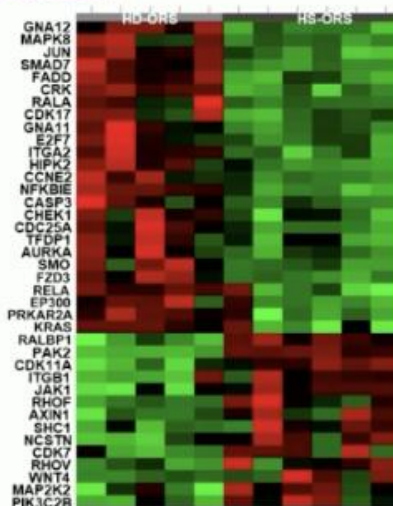
- Tratamiento precoz: Los pacientes con una menor duración de enfermedad tienen mayor respuesta al tratamiento biológico
- Supervivencia del tratamiento: La supervivencia de los tratamientos biológicos en HS reflejan progresión de la enfermedad

Early target ? Before the lesion: keratinocyte dysfunction

Keratinocytes from HS patients are associated with increased production of pro-inflammatory mediators

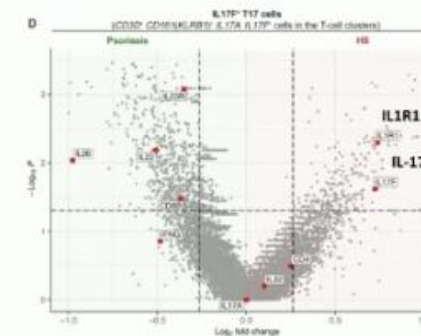
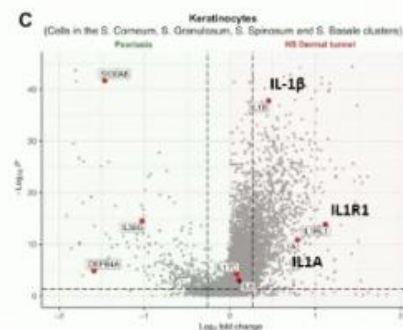


HS-ORS are associated with Type I interferon signature following IFI16/STING pathway activation

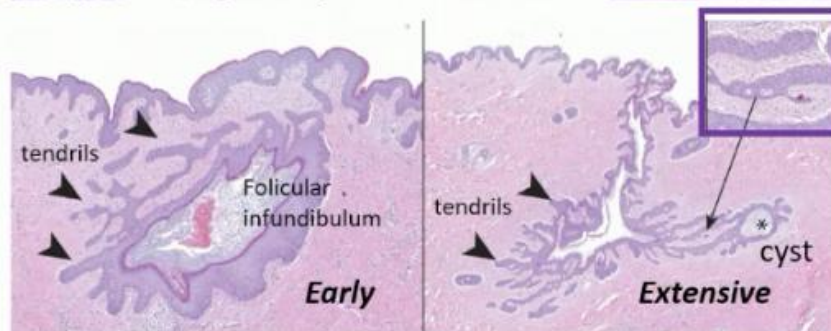
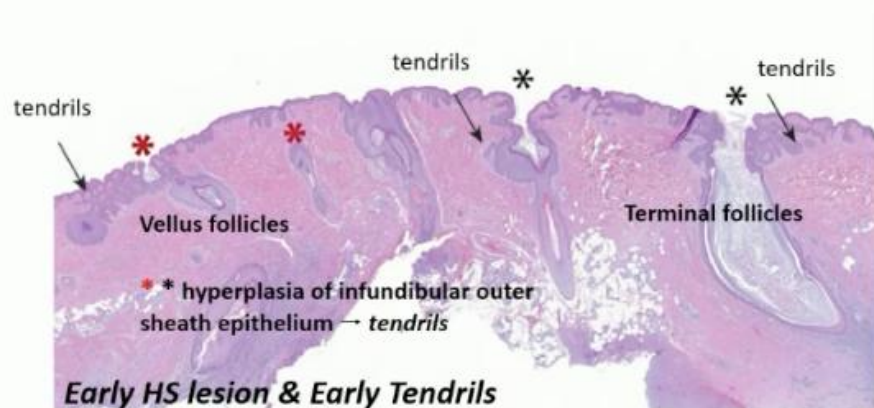


- **HS keratinocytes vs. healthy donors**
 - Pro-inflammatory profile
 - **↑ Secretion of IL-1β, IP-10, CCL5 (RANTES)**
 - Both constitutive and after bacterial stimulation
- **Outer Root Sheath (ORS)**
 - ORS = external sheath of the hair follicle
 - Type I interferon signature (IFI16/STING pathway)

Early IL-1 β production could be the link to IL-17A and IL-17F overproduction in HS



Before the tunnels: tendrils as a key treatment target ?

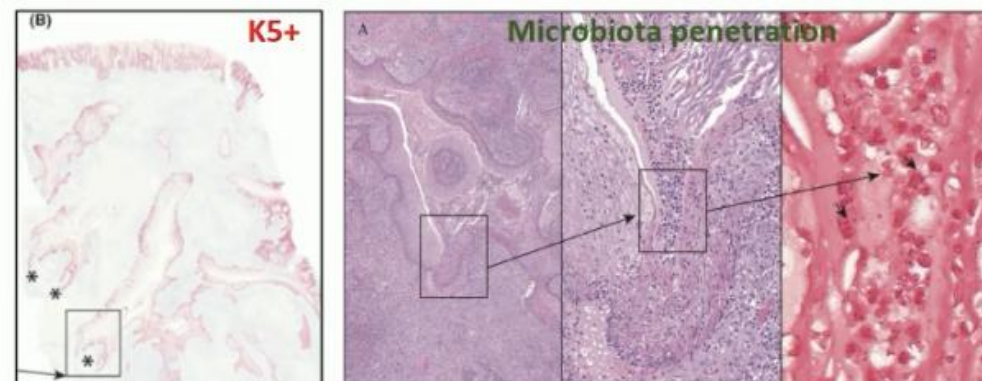


Tendrils develop early in the disease before rupture of the infundibular lumen.

Their growth does not require substantive inflammation to progress.

- Histological structures
- « Pseudopod-like », « tentacle-like »
- Arising from the infundibulum of dilated hair follicles in HS
- K5+: pro-inflammatory keratinocytes
- Ki67+ hyperproliferative keratinocytes

Tendrils display a pro-inflammatory, hyperproliferative phenotype and provide an entry point for microbial invasion





• Fluctuaciones hormonales y modalidades de tratamiento en mujeres con hidradenitis supurativa

En la HS hay **aumento de la actividad del receptor de andrógenos**, lo que favorece la inflamación.

Muchas pacientes presentan **exacerbaciones premenstruales** (43–63%), asociadas a la **disminución de progesterona** antes de la menstruación.

La HS se relaciona con alteraciones hormonales como **síndrome de ovario poliquístico, irregularidades menstruales e hiperandrogenismo**.

Hormonal antiandrogens

- Limited clinical studies
- Combined OCP → **Cyproterone acetate and oestrogens**
- Progestogens induce/worsen a pre-existing HS due to their androgenic properties
- Spironolactone & finasteride can be added for their antiandrogenic properties (*response: 40% - 85*)

Hormonal antiandrogens

- Finasteride
 - a competitive androgen receptor antagonist
- 5 mg, well-tolerated
- Improvement: 40–85%
 - in some cases

Polycystic ovary syndrome

- Menstrual abnormalities
- Signs of hyperandrogenism
- Upper normal/high androstenedione and testosterone levels
- Low SHBG (sex hormone binding protein)

Spironolactone

- *synthetic anti-mineralocorticoid with antiandrogen/gestagen/oestrogen/glucocorticoid effects; potassium-sparing diuretic compound*

Dosage, duration of treatment:

- no standard dose
- no enough evidence for recommendation
- **100 mg/day** (50–150 mg/day)

Limitations of side effects:

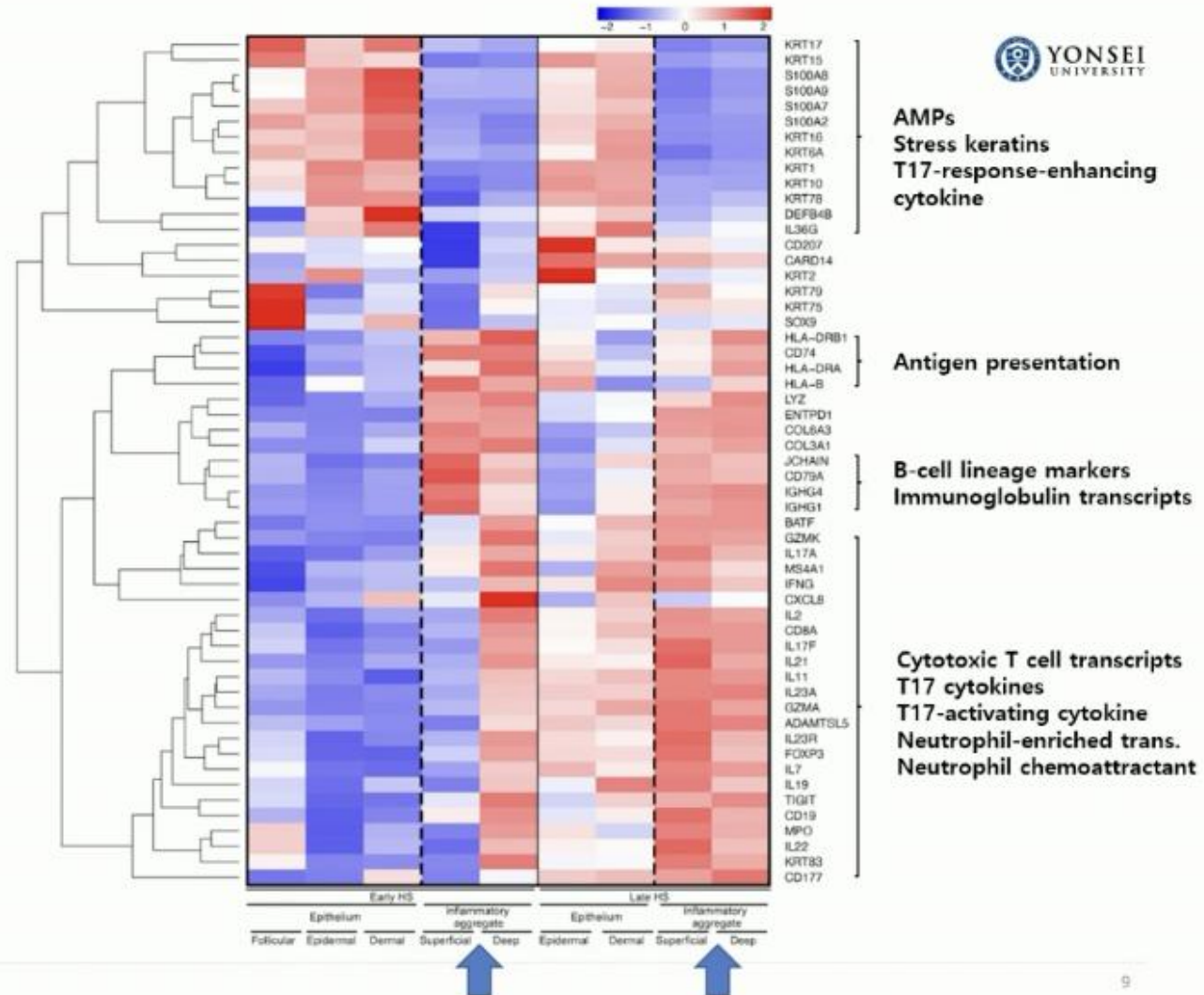
- starting - 25 / 50 mg/day
- subsequently increased after a few weeks
- Responses: usually within 3 months
- Improvement in pain, inflammatory lesion count & physician-assessed disease severity
- A positive effect on the quality of life

Early intervention in HS

Early vs. Late stage HS

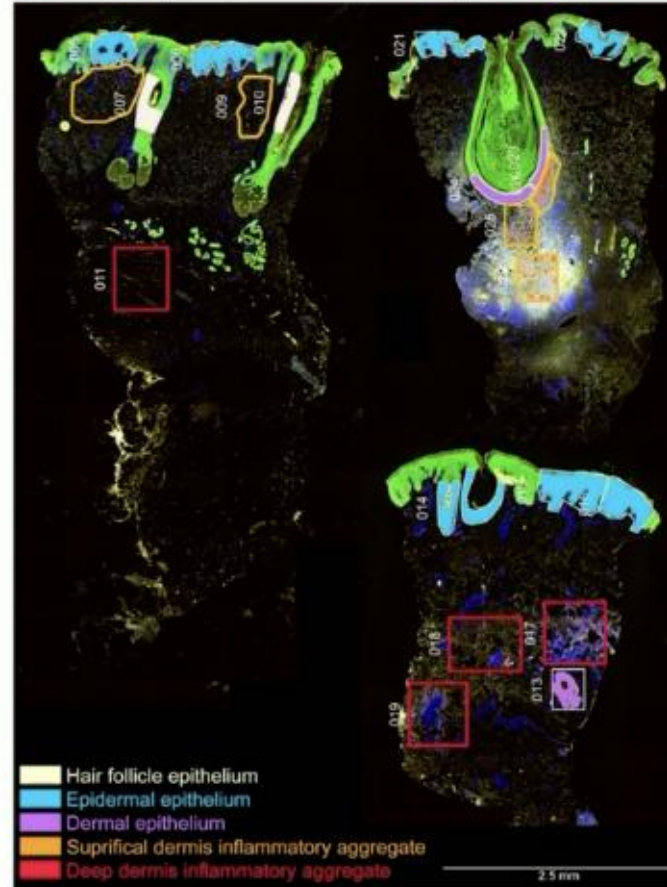
Early HS without dermal tunnels, TLS, fibrosis Is still enriched with inflammatory signals

- Early HS enriched with transcripts associated with **B cells**, **cytotoxic T cells**, **Th17 pathway**, and **neutrophils**
- Early HS epithelium and superficial inflammation
 - AMPs, stress keratins, IL36G
 - Antigen presentation (MHC molecules)
 - B cell lineage markers (CD79A, CD19)
 - Plasma cell transcripts (JCHAIN)
- Early deep HS ~ Late HS inflammation
 - Cytotoxic T cell (CD8A, GZMK, GZMA)
 - **T17 cytokines** (IL17F, IL17A, IL21, IL22, IFNG)
 - **T17 activating cytokines** (IL23A)
 - **Neutrophil enriched transcripts** (MPO, CD177)
 - **Neutrophil chemoattractants** (CXCL8)

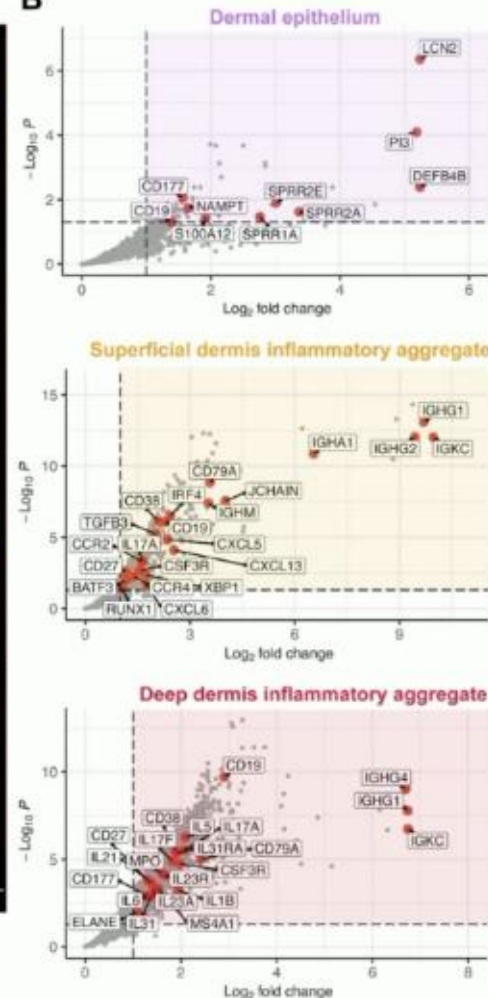


Mapeo de los paisajes inmunitarios tempranos en la hidradenitis supurativa mediante transcriptómica espacial integrada

A Early stage hidradenitis suppurativa



B



Early HS inflammatory microenvironment differ between superficial vs. deep

• Dermal epithelium in early HS (PanCK+ ROIs)

- AMPs
- B cell lineage markers (CD19)
- Neutrophil enriched genes (CD177, NAMPT, LCN)

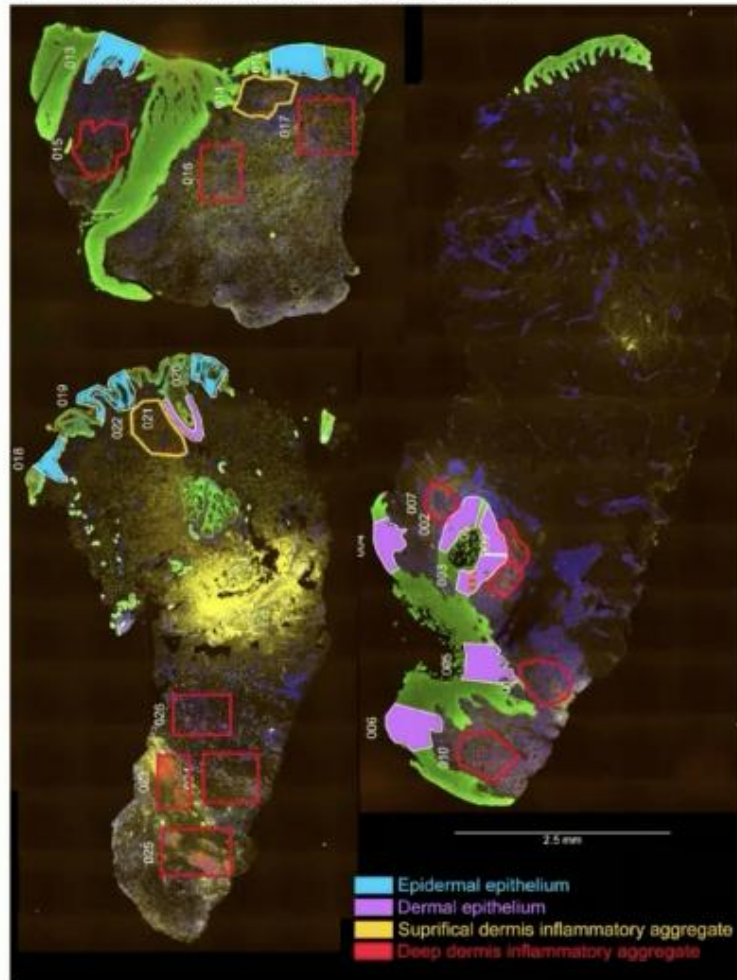
• Superficial vs. Deep dermis in early HS

- Superficial dermis high:
 - Immunoglobulin, B cell, plasma cell transcripts
- Deep dermis high:
 - T17 cytokines (IL17F, IL21, IL22, IL23R, IL26, TNF)
 - T17 cell-recruiting chemokines (CCL20)
 - Neutrophil enriched transcripts (MPO), CXCL8

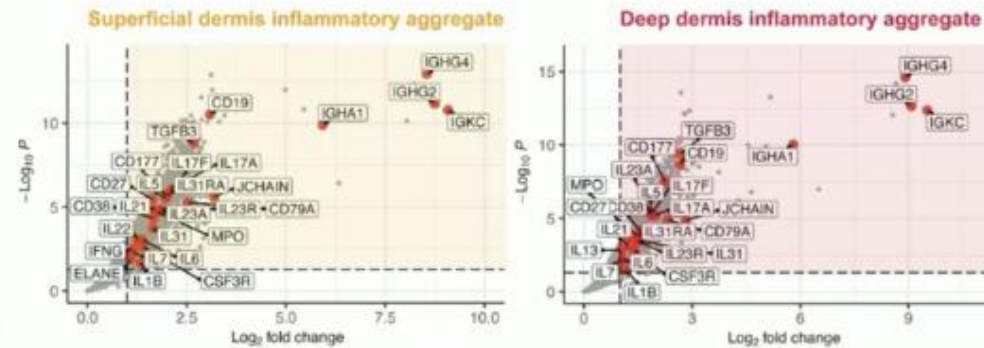
neutrophil chemoattractants (CXCL1 and CXCL6) were higher in dermal epithelium

Mapeo de los paisajes inmunitarios tempranos en la hidradenitis supurativa mediante transcriptómica espacial integrada

A Late stage hidradenitis suppurativa



Late HS reveals full-thickness inflammatory microenvironment

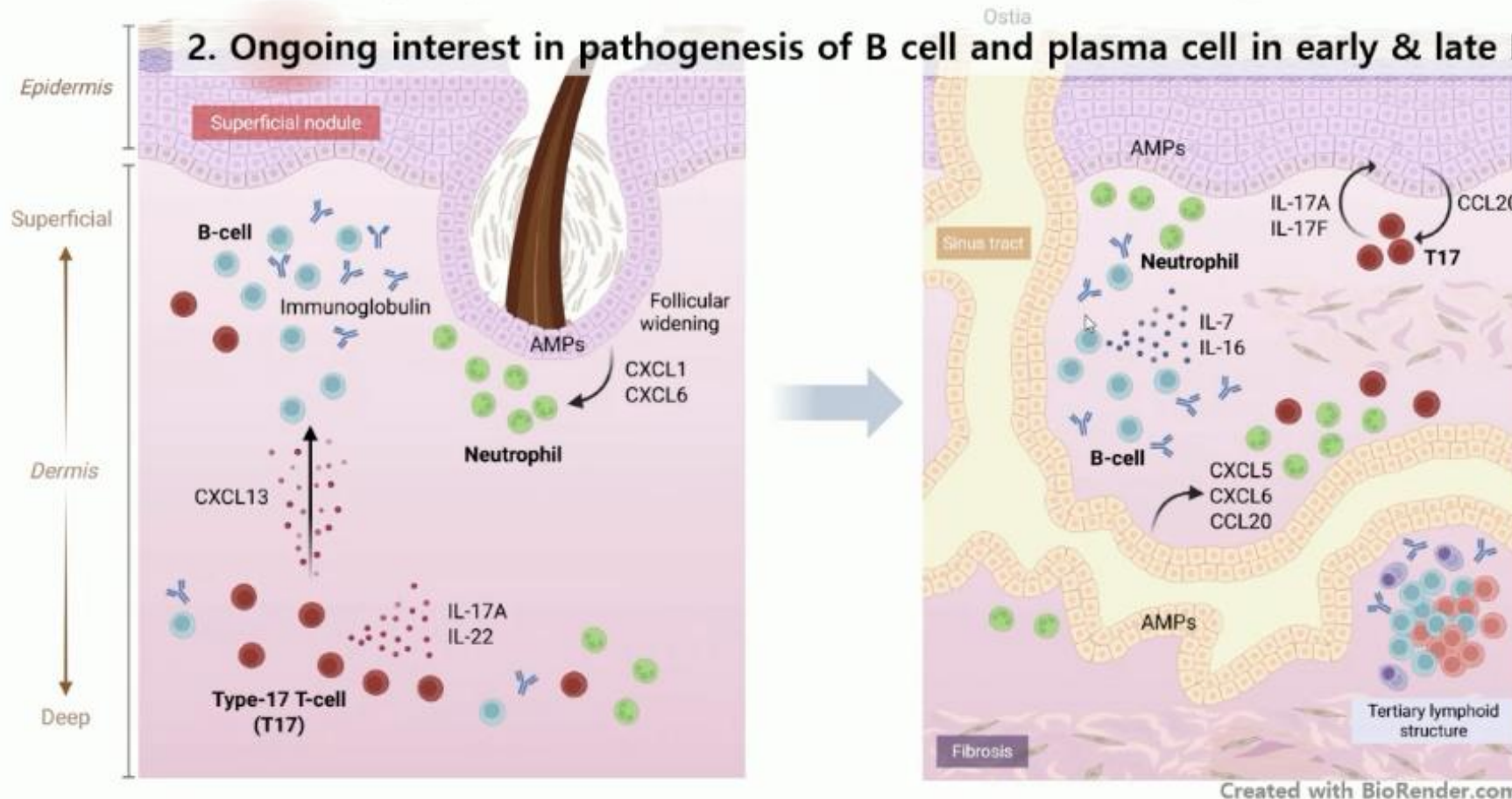


- Both superficial & deep dermis in late HS showed increased expressions of:
 - B cell marker (CD19, CD79A) & immunoglobulins
 - Plasma cell-related transcripts (JCHAIN, CD38, CD27)
 - T17 cytokines (IL17A, IL17F, IL21, IL23R)
 - T17 inducing transcripts (TGFβ3, IL1B, IL6)
 - Neutrophil-enriched transcripts (CD177, MPO, CSF3R)

Mapeo de los paisajes inmunitarios tempranos en la hidradenitis supurativa mediante transcriptómica espacial integrada

1. Important concept regarding Th17 autoinflammation
(independent of follicular occlusion paradigm, from the deep dermis)

2. Ongoing interest in pathogenesis of B cell and plasma cell in early & late HS



Mapeo de los paisajes inmunitarios tempranos en la hidradenitis supurativa mediante transcriptómica espacial integrada

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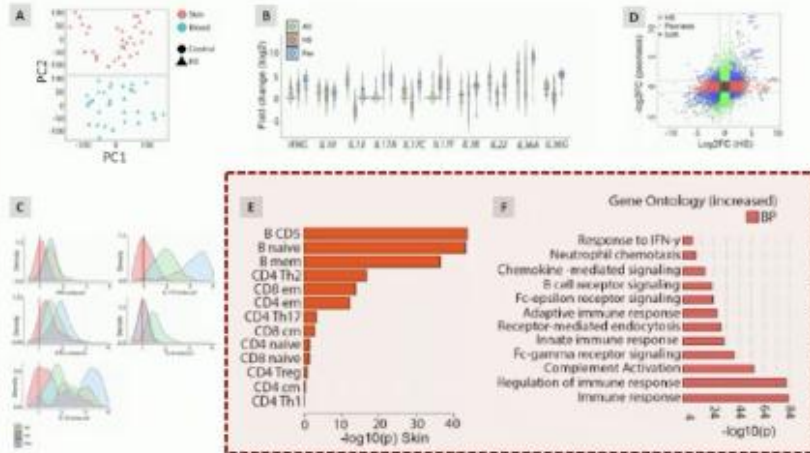
On the horizon Pipeline therapeutics

What about B cells?

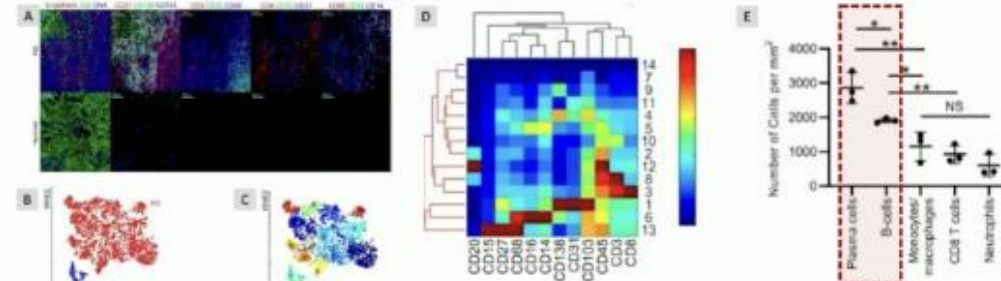
Contribution of plasma cells and B cells to hidradenitis suppurativa pathogenesis

Johann E. Gudjonsson¹, Lam C. Tsoi^{1,2,3}, Feiyang Ma⁴, Allison C. Bill¹, K.R. van Straalen⁵, A.R.V. Vossen⁶, H.H. van der Zee¹, Paul W. Harms^{1,4}, Rachael Wasikowski¹, Christine M. Yee⁷, Syed M. Rizvi¹, Xianying Xing¹, Erze Xing¹, Olesya Plazylo¹, Chang Zeng¹, Matthew T. Patrick¹, Margaret M. Lowe⁸, Richard E. Burney⁹, Jeffrey H. Kozlow¹⁰, Jit R. Cherry-Bukowiec¹¹, Yanyun Jiang¹, Joseph Kirma¹, Stephan Weidinger¹², Kelly C. Cushing¹³, Michael D. Rosenblum¹⁴, Céline Berthier¹⁵, Amanda S. MacLeod¹⁶, John J. Voorhees¹, Fei Wen¹, J. Michelle Kahlenberg¹⁶, Emanuel Maverakis¹⁷, Robert L. Modlin¹⁸ and Errol P.rens¹

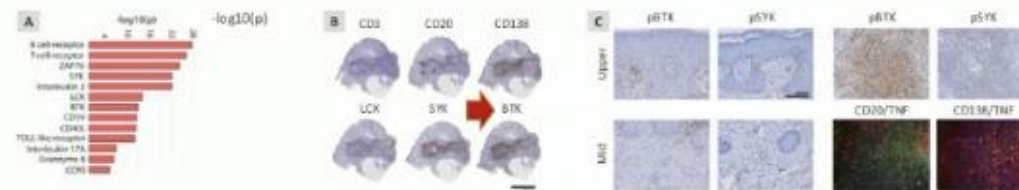
- RNAseq, scRNAseq and CyTOF on moderate-to-severe HS patients' skin and blood
- **Characterization of the inflammatory process in HS by RNA-seq is suggestive of heightened B cell responses**



- B and plasma cells are the dominant infiltrating leukocytes in HS as shown from CyTOF analysis



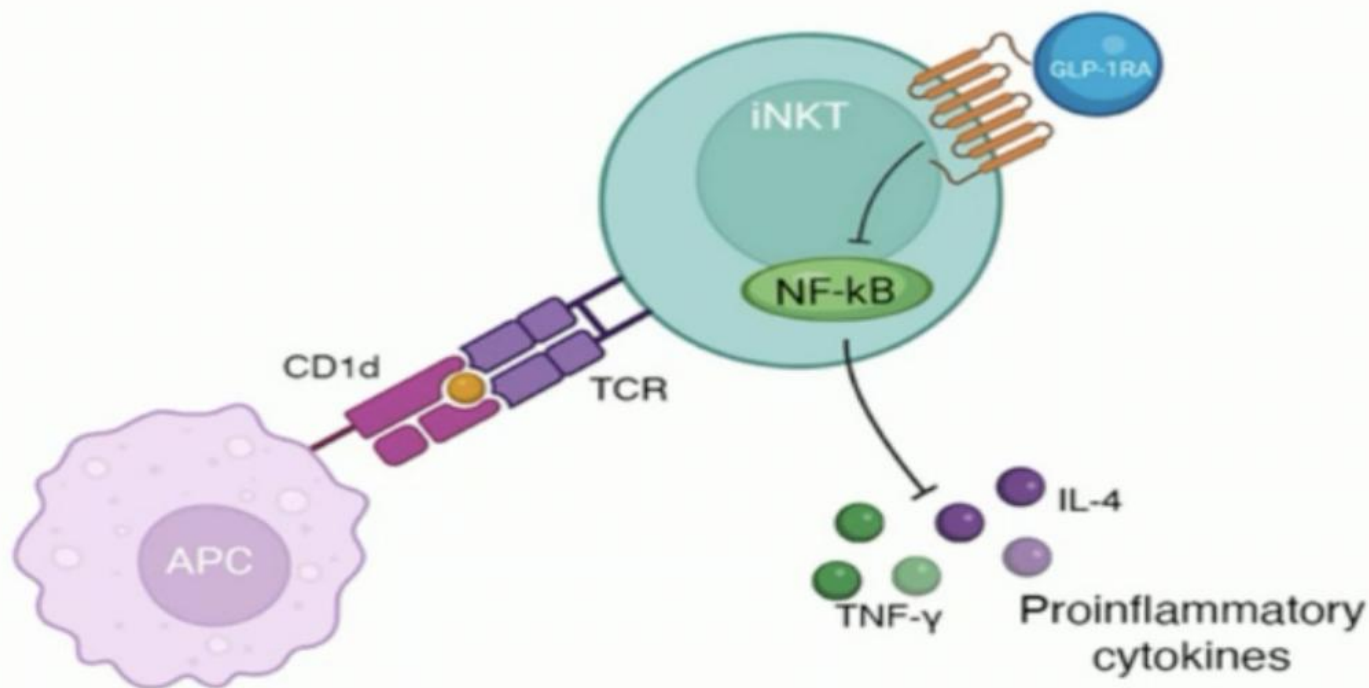
- CD3+ T cells, CD20+ B cells, and CD138+ plasma cells mostly concentrated in the deeper aspect of the biopsy, around the dermal sinus tract
- Enrichment for BCR signaling
- TNF expression was localized to CD138+ plasma cells
- Successful treatment with anti-CD20 agent rituximab has been case-reported (J Dermatol. 2018)



JCI Insight. 2020 Oct 25;19(19):e139930.

Tratamiento: Agonistas GLP-1 y hidradenitis supurativa

Suggested mechanisms



responsible for
improvement in HS severity in
patients receiving GLP1-RA.

Los agonistas de **GLP-1** podrían mejorar la **severidad** de la hidradenitis al **modular la inflamación**: reducen la expresión de TNF- α y de citocinas proinflamatorias, e inhiben la vía del NF- κ B.

RESEARCH ARTICLES | JULY 22 2021

Metabolic Disorders/Obesity Is a Primary Risk Factor in Hidradenitis Suppurativa: An Immunohistochemical Real-World Approach

Katarzyna P. Kaleta; Georgios Nikolakis; Amir M. Hossini; Ottfried Balthasar; Daifallah Almansouri; Aristeidis Valopoulos; Jürgen Knolle; Anna Bogusławska; Anna Wojas-Pelc; Christos C. Zouboulis

Dermatology (2022) 238 (2): 251–259.

Inflammatory marker expression by obesity and smoking status

- The level of IL-17R expression is positively associated with obesity and smoking.
- Obese/smoking patients may require higher anti-IL17 doses in order to adequately block IL-17R.



Agonistas GLP-1 y hidradenitis suppurativa

2025
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Research Letter

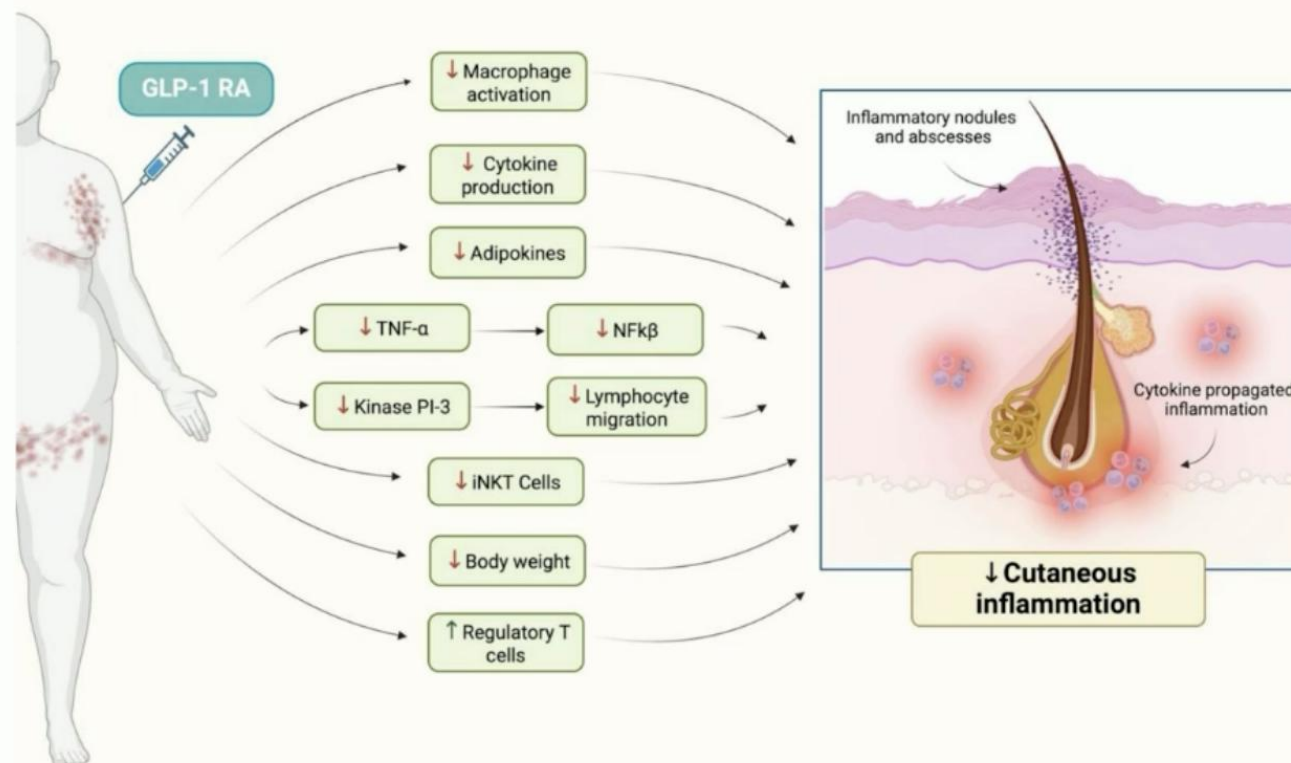
Glucagon-Like Peptide-1 Receptor Agonists in Hidradenitis Suppurativa

Louise Gouvion, MD¹; [Maia Delage, MD, PhD²](#); Axel P. Villani, MD, PhD³; [et al](#)

» [Author Affiliations](#) | [Article Information](#)

“ Cite Permissions Metrics Comments

JAMA Dermatol
Published Online: August 13, 2025
doi: 10.1001/jamadermatol.2025.2723



Krajewski PK, Zlotowska A, Szepletowski JC. The Therapeutic Potential of GLP-1 Receptor Agonists in the Management of Hidradenitis Suppurativa: A Systematic Review of Anti-Inflammatory and Metabolic Effects. J Clin Med. 2024 Oct 22;13(21):6292.

Tratamiento: Agonistas GLP-1 y hidradenitis suppurativa



Liraglutide for the treatment of obesity among patients with hidradenitis suppurativa

Liraglutida en el tratamiento de la obesidad en pacientes con hidradenitis suppurativa

Joana Nicolau^a, Antoni Nadal^b, Pilar Sanchís^a, Antelm Pujol^a, Lluís Masmiquel^a

	Baseline	Liraglutide 3mg for 3 months	
BMI	39.3	35.6	p=0.0
CRP	4.5	3	p=0.0
Hurley	2.6	1.1	p=0.0
DLQI	12.3	9.7	p=0.0

Methods: 14 patients started treatment with liraglutide for 3 months. 3mg daily
2 out of 14 (14.3%) were treated with biological agents

Nicolau J, Nadal A, Sanchís P, Pujol A, Masmiquel L, Nadal C. Liraglutide for the treatment of obesity among patients with hidradenitis suppurativa. Med Clin (B). 10.1016/j.medcli.2023.11.007. Epub 2023 Dec 2. PMID: 38044187.



JOURNAL ARTICLE

Semaglutide for weight loss in people with obesity as an adjunctive treatment for hidradenitis suppurativa: its impact on disease control and quality of life

Daniel Lyons , Anusha Louly Nathan, Emily Pender, Gregg Murray, Conor Smith, Brian Kirby, Rosalind Hughes [Author Notes](#)

British Journal of Dermatology, Volume 191, Issue 4, October 2024, Pages 631–633,
<https://doi.org/10.1093/bjd/ljae216>

Table 1 Data from 30 patients with obesity and hidradenitis suppurativa before and during treatment with semaglutide

Parameter	Before semaglutide treatment	During semaglutide treatment	95% CI	Adjusted P-value
BMI (kg m ⁻²)	43.1	41.5	−2.04, 10.04	0.48
Weight (kg)	117.7	111.6	2.88, 9.29	< 0.001
CRP (mg L ⁻¹)	7.8	6.9	−2.14, 5.11	0.95
WCC (×10 ⁹ cells L ⁻¹)	8.89	8.48	−3.28, 3.63	> 0.99
Neutrophils (×10 ⁹ cells L ⁻¹)	5.87	5.23	−2.87, 4.03	> 0.99
Lymphocytes (×10 ⁹ cells L ⁻¹)	2.59	2.45	−3.37, 3.54	> 0.99
Neutrophil: lymphocyte ratio	2.42	2.19	−3.19, 3.66	> 0.99
Glucose (mmol L ⁻¹)	5.36	5.35	−5.19, 5.90	> 0.99
HbA1c (mmol mol ⁻¹)	39.3	36.6	0.22, 9.70	0.03
Flare frequency (weeks)	8.5	12.0	−10.85, 1.78	0.38
DLQI	13	9	1.70, 10.68	0.001

Data are presented as mean, unless otherwise stated. BMI, body mass index; CI, confidence interval; CRP, C-reactive protein; DLQI, Dermatology Life Quality Index; HbA_{1c}, haemoglobin A_{1c}; WCC, white cell count.

Patients experienced fewer HS flare-ups (decreasing from an average of every 8.5 weeks to every 12 week

0.8 mg weekly of 8 months

Lyons D, Nathan A, Pender E, et al. Semaglutide for weight loss in obese patients as an adjunctive treatment for hidradenitis suppurativa: its impact on disease control and quality of life. Br J Dermatol. 2024;191(4):631–633. doi:10.1093/bjd/ljae216

14 pacientes
Liraglutide 3 mg diario

Tratamiento: Agonistas GLP-1 y hidradenitis suppurativa



Liraglutide for the treatment of obesity among patients with hidradenitis suppurativa

Liraglutida en el tratamiento de la obesidad en pacientes con hidradenitis suppurativa

Joana Nicolau^a, Antoni Nadal^b, Pilar Sanchís^a, Antelm Pujol^a, Lluís Masmiquel^a, Cristina Nadal^b

	Baseline	Liraglutide 3mg for 3 months	
BMI	39.3	35.6	p=0.002

CASE REPORT

A case of recalcitrant hidradenitis suppurativa concomitantly treated with tirzepatide

Lina J. Chan, BS,^a Manjit Kaur, MBBS,^b and Benjamin H. Kaffenberger, MD^a

Key words: gastric inhibitory peptide/glucagon-like peptide 1 agonist; GLP-1; hidradenitis suppurativa; tirzepatide.

Table I. Patient's glycemic laboratory tests, body mass index, patient reported, and physician reported outcomes before and after tirzepatide therapy

	Before tirzepatide	3 mo after tirzepatide
Fasting blood sugar	179	95
Random blood sugar	220	108
HbA1C	10.1	5.4
Triglycerides	233	139
BMI	41.36	33.63
DLQI	14	3
VAS	3	1
HS-PGA	Moderate	Mild
HISCR-sum of abscesses and inflammatory nodules	5	3

BMI, Body mass index; DLQI, Dermatology Life Quality Index; HbA1C, glycosylated hemoglobin; HISCR, Hidradenitis Suppurativa Clinical Response; HS-PGA, Hidradenitis Suppurativa Physician's Global Assessment; VAS, visual analog scale.

inflammatory, painful nodules, and draining sinus tracts in her axillae, inframammary region, and inguinal folds. polycystic ovarian disease, type 2 diabetes mellitus, failing topicals and systemics, including antibiotics, oral contraceptives, spironolactone, oral corticosteroids, and adalimumab. Tirzepatide was increased to (7.5 mg/0.5 mL once a week)

JOURNAL ARTICLE

JOURNAL ARTICLE

Semaglutide for weight loss in people with obesity as an adjunctive treatment for hidradenitis suppurativa: its impact on disease control and quality of life

Daniel Lyons, Anusha Louly Nathan, Emily Pender, Gregg Murray, Conor Smith, Brian Kirby, Rosalind Hughes Author Notes

British Journal of Dermatology, Volume 191, Issue 4, October 2024, Pages 631–633, <https://doi.org/10.1093/bjd/ljae216>

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Nathan A, Pender E, et al. Semaglutide for weight loss in obese patients as an adjunctive treatment for hidradenitis suppurativa: its impact on disease control and quality of life. *Br J Dermatol*. 2024;191(4):631–633. [1093/bjd/ljae216](https://doi.org/10.1093/bjd/ljae216)

Grasa y adipocitos e hidradenitis supurativa

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METHODS

1

Population selection

- 1) >18 yo HS patients
- 2) No concomitant anti-cholesterol/fatty acids medications



2

Clinical features



Serum blood analysis



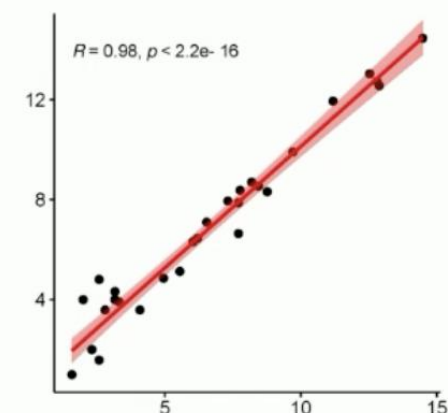
NLR,
MLR, PLR,
SII, SIRI,
PIV



LDL, HDL,
cholesterol,
fatty acids

3

Correlations between clinical indices and serum profile



Grasa y adipocitos e hidradenitis supurativa



1



Obese HS patients show higher **fatty acids** levels than non-obese ones

2



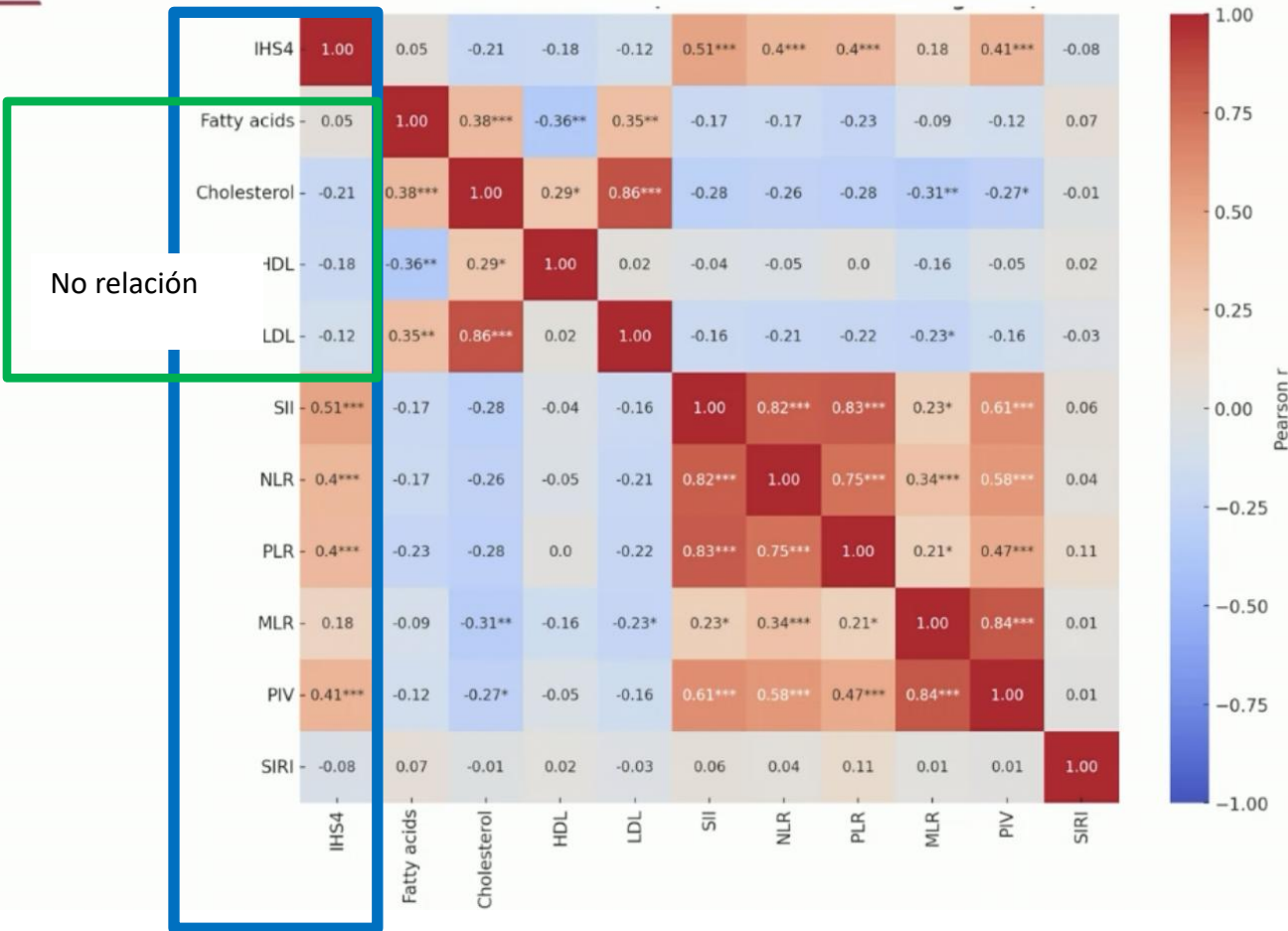
IHS4 correlates with **systemic inflammatory indexes**, not with lipid serum values

3



Need for basic science research on **HS fat tissue as source of disease-specific inflammation**

RESULTS



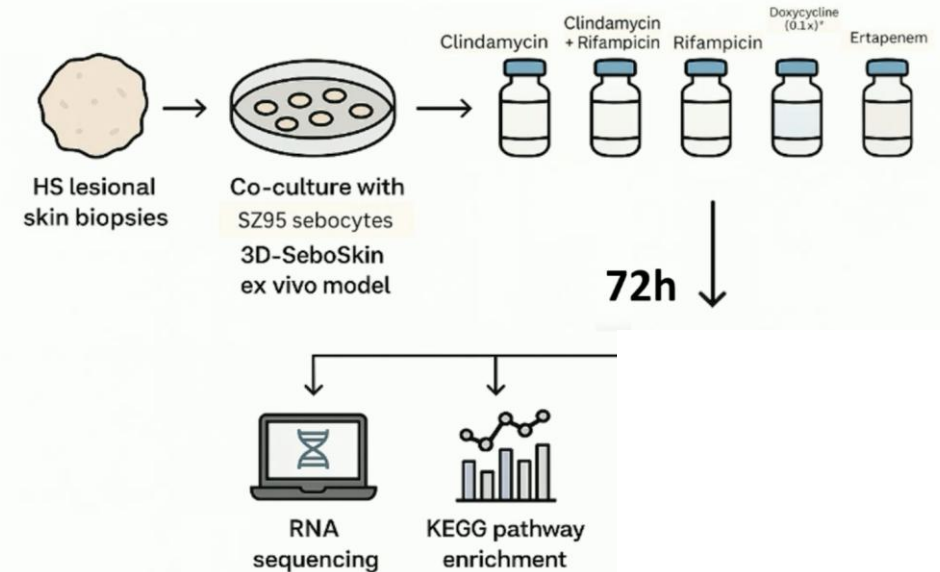
3D Seboskin model of hidradenitis suppurativa: Insights into antibiotic response

WHY STUDY ANTIBIOTICS IN HS?

- Antibiotics are widely used to treat hidradenitis suppurativa (HS).
- Antibiotics may have immunomodulatory properties beyond combating bacteria.
- Exploring antibiotics' broader effects could improve HS management.



EXPERIMENTAL DESIGN



EFFECTS OF ANTIBIOTICS ON CYTOKINES AND TRANSCRIPTOMICS

ANTIBIOTIC		PROTEIN-LEVEL EFFECT	RNA-LEVEL EFFECT
CLINDAMYCIN		↓ IL-1 β , IL-17AF, IL-18 ↑ E-selectin, ICAM-1, GM-CSF, CXCL1	↓ IL-6, S100A8, S100A9, CXCL1
CLINDAMYCIN+ RIFAMPICIN		↓ E-selectin, IL-1 β ↑ ICAM-1, CXCL2, MMP-3	↓ S100A9, MMP-9 ↑ MMP-1, MMP-3, CXCL2, CCL2
RIFAMPICIN		↓ E-selectin ↑ GM-CSF, G-CSF	↑ DEFB4A, DEFB4B, MMP-1, MMP-3, CCL2
DOXYCYCLIN		↑ MCP-1, MIP-2 α	NO SIGNIFICANT TRANSCRIPTOMIC EFFECTS
ERTAPENEM		↓ IL-18	NO SIGNIFICANT TRANSCRIPTOMIC EFFECTS

Resultados principales

1. Clindamicina

1. Mostró el **efecto antiinflamatorio más fuerte**.
2. Disminución de **IL-1 β , IL-17AF, IL-18, y S100A8/S100A9**, *moléculas relevantes en la inflamación del epitelio*.
3. Incrementó algunas moléculas de adhesión y citoquinas como GM-CSF y CXCL1, probablemente parte de su perfil modulador.

Clindamicina + rifampicina

1. Perfil mixto, con pérdida de parte de la actividad antiinflamatoria de la clindamicina en monoterapia.

Rifampicina

1. Impacto en vías endoteliales y antimicrobianas.
2. Menos efector antiinflamatorio directa.

Doxiciclina

1. En este modelo, **no se evidenció un efecto antiinflamatorio claro**.

Ertapenem

1. Disminución de **IL-18**, lo que sugiere un potencial papel en la homeostasis de los queratinocitos.

Comorbilidades: Sinus pilonidal



- El PSD es una de las comorbilidades de la HS.
→ Sin embargo el cribado hidradenitis supurativa en pacientes con sinus pilonidal **no** forma parte de la atención estándar.

- Proposition to fulfill a **validated screening questionnaire**^{5, 6} including demographics questions as well as **two specific questions**:
 - *“Do you have recurrent boils of the skin”*
 - *“Do you have had for the past 6 months 2 or more boils/abscesses in any of these locations: the axilla, the groin, around the genitals, in the perineum, under the breast, on the buttocks, other site(s)”*
- Patients who answered « **Yes** » or « **Unsure** » were invited to be **interviewed by an HS specialist (PG)** to determine whether they had HS or not, according to the **Dessau’s diagnostic criteria**⁷

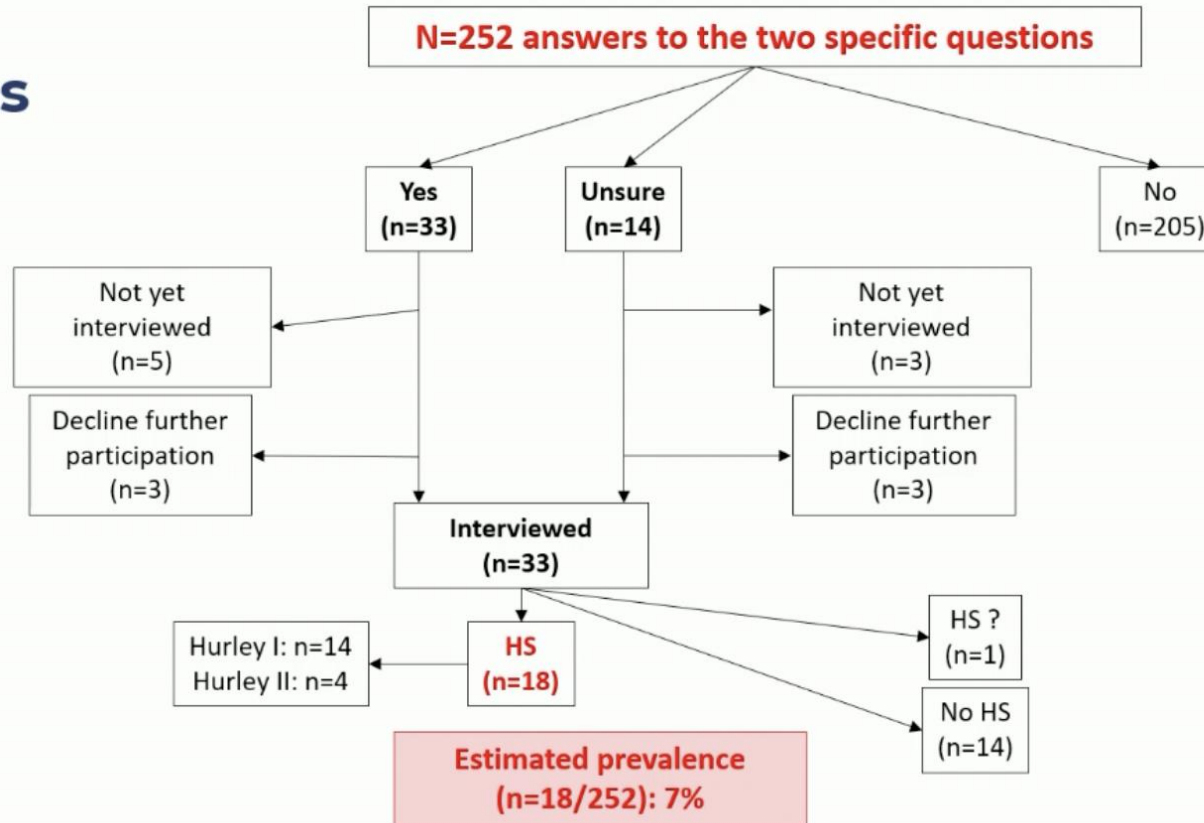
Results

DEMOGRAPHICS (n = 252)		
Sex	Females	38%
	Males	62%
Mean age (y)		25.2 (SD 8)
Mean age at PSD occurrence (y)		22.1 (SD 7)
Mean BMI (kg/m ²)		25.3 (SD 4.5)
Former/current smokers		37%
Guner stage	I-II	60%
	III-IV	33%
	Unknown	7%
Recurrent PSD		32%

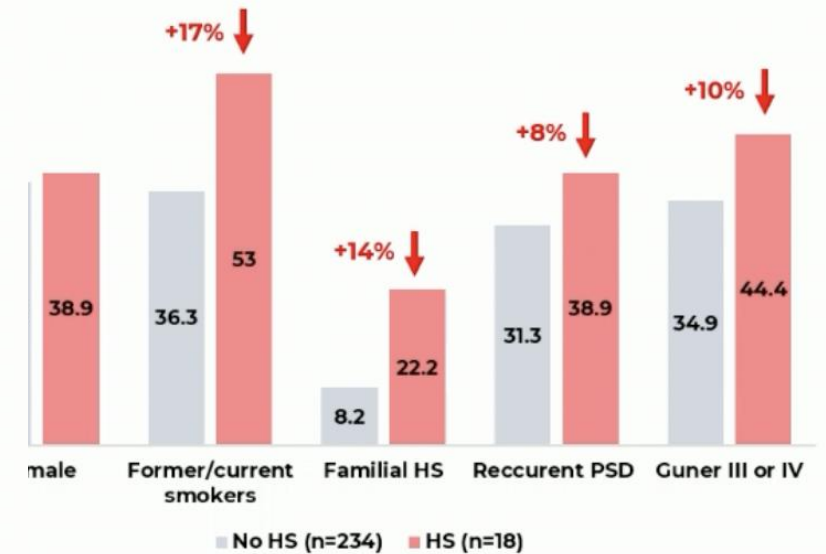
Comorbilidades: Sinus pilonidal



Results



Clinical features 2 (%)

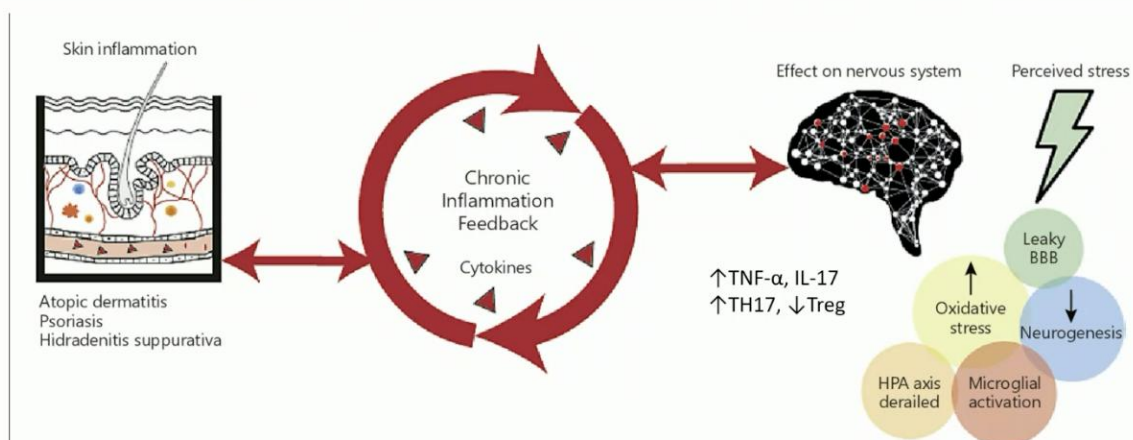


Comorbilidades Psiquiátricas

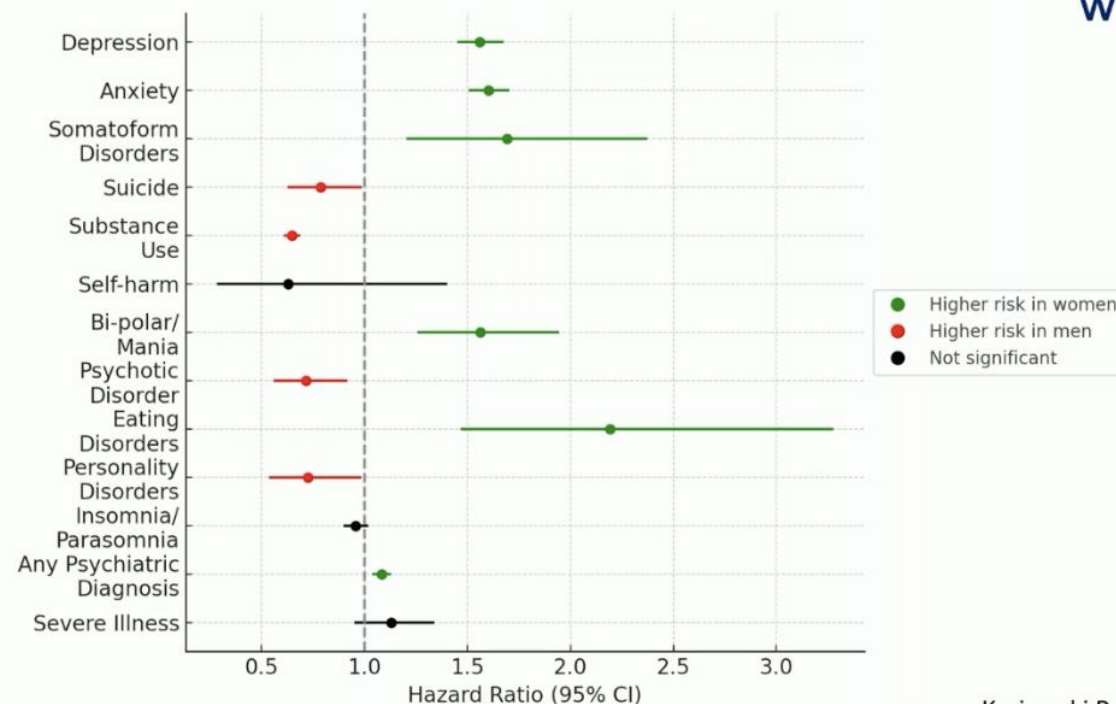
63% HS patients had at least one documented **psychiatric diagnosis** (ICD-10-CM **F01–F99**) recorded either prior to or during the 10-year observation period (2015–2025).

- Las mujeres parecen tener un riesgo mayor que los hombres de trastornos psiquiátricos

Mecanismo fisiopatológico



Comparative risk of psychiatric morbidity in women and men with HS



Farzanfar D, et al. Inflammation: a contributor to depressive comorbidity in inflammatory skin disease. *Skin Pharmacol Physiol.* 2018;31:246-251.
Zafiriou E, et al, Bogdanos DP. Depression and obesity in patients with psoriasis and psoriatic arthritis: is il-17-mediated immune dysregulation the connecting link? *Front Immunol.* 2021;12:699848.

Tratamiento: Upadacitinib a largo plazo



- 6 pacientes tratados con Upadacitinib durante al menos 78 semanas.

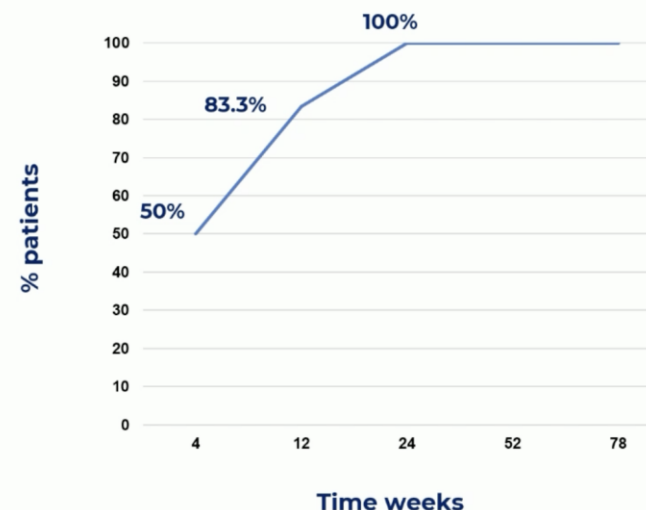
Results II

Clinical characteristics of HS patients	
Hurley, n (%)	I 0 (0.0) II 1 (16.7) III 5 (83.3)
IHS4, n (%)	Mild 0 (0.0) Moderate 0 (0.0) Severe 6 (100.0)
IHS4 Mean $\pm$ SD	29.5 $\pm$ 4.3
Phenotype*, n (%)	Typical 5 (83.3) Atypical 1 (16.7) Syndromic 0 (0.0)
Family history of HS	2/6

Previous treatments

Topical antibiotics, n (%)	6 (100.0)
Tetracyclines, n (%)	5 (83.3)
CL + RF, n (%)	1 (16.7)
Other antibiotics, n (%)	1 (16.7)
Cyclosporin A, n (%)	4 (66.7)
Surgery, n (%)	2 (33.3)
Adalimumab, n (%)	6 (100.0)

Results IV IHS4-55



- At **week 4**, 50% achieved IHS4-55, increasing to **83.3%** by **week 12** and **100%** by **week 24**, maintaining this response through week 78.

Tratamiento: Upadacitinib a largo plazo

- 6 pacientes tratados con Upadacitinib durante al menos 78 semanas.

EA
DV CONGRESS



A 56-year-old male patient
--> upper respiratory tract infection

A 36-year-old female patient
--> lymphocytopenia shown in
blood tests

**No new safety concerns were observed over
the 78 weeks of treatment**



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Patrocina:



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Brilla el futuro de *la dermatología*,
donde nace *la luz*

La Academia Española de Dermatología y Venereología expresa su agradecimiento al patrocinador UCB, por su especial apoyo y contribución con la actividad formativa Highlights 2025.



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