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highlights
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8-12 MARZO
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DE DERMATOLOGÍA
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AAD ANNUAL MEETING

AEDV highlights

SAN DIEGO

8-12 MARZO

# ACNÉ Y ROSÁCEA

ACADEMIA ESPAÑOLA
DE DERMATOLOGÍA
Y VENEREOLOGÍA

# HIGHLIGHTS ACNÉ Y ROSÁCEA

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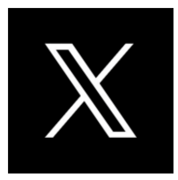

# DECLARO QUE NO TENGO CONFLICTOS DE INTERÉS PARA ESTA PRESENTACIÓN

# ÍNDICE

1. PRESENTACIÓN GUÍAS DE TRATAMIENTO ACNÉ AAD 2023
2. TRATAMIENTO TÓPICO DEL ACNÉ
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4. TRATAMIENTOS ANTIANDROGÉNICOS EN ACNÉ E HIPERANDROGENISMO
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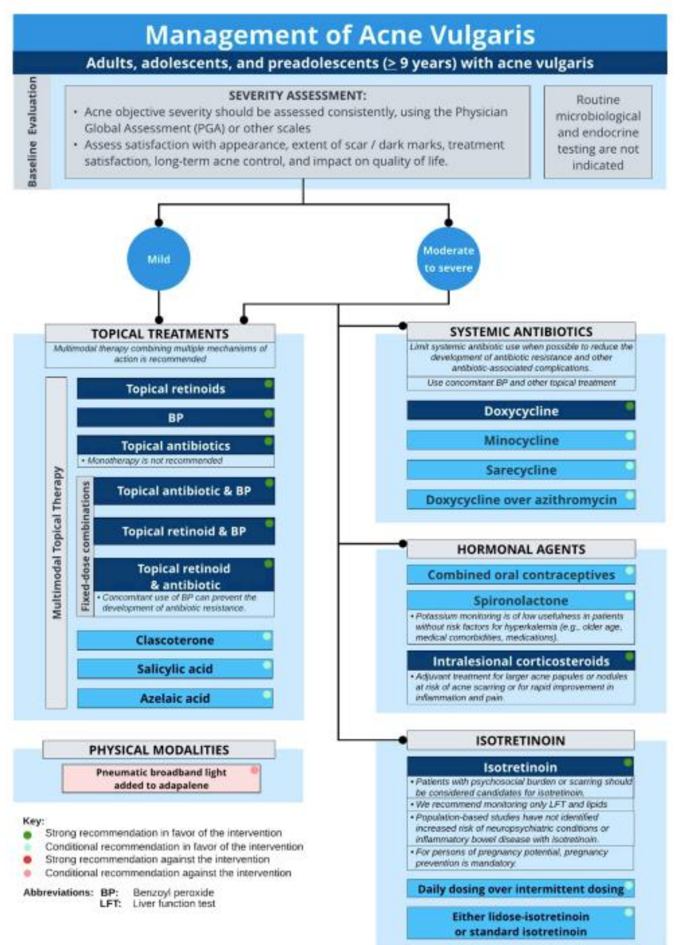
# GUÍAS CLÍNICAS AAD 2023

## ENLACE A LAS GUÍAS 2023




ARTICLE IN PRESS

FROM THE ACADEMY

## Guidelines of care for the management of acne vulgaris


Rachel V. Reynolds, MD (Co-Chair),[a] Howa Yeung, MD, MSc,[b] Carol E. Cheng, MD,[c] Fran Cook-Bolden, MD,[d] Seemal R. Desai, MD,[e,f] Kelly M. Druby, BSN,[g] Esther E. Freeman, MD, PhD,[h] Jonette E. Keri, MD, PhD,[i,j] Linda F. Stein Gold, MD,[k] Jerry K. L. Tan, MD,[l,m] Megha M. Tollefson, MD,[n] Jonathan S. Weiss, MD,[b,o] Peggy A. Wu, MD, MPH,[p] Andrea L. Zaenglein, MD,[q] Jung Min Han, PharmD, MS,[r] and John S. Barbieri, MD, MBA (Co-Chair)[s]


Key:

- Strong recommendation in favor of the intervention
- Conditional recommendation in favor of the intervention
- Strong recommendation against the intervention
- Conditional recommendation against the intervention

Abbreviations: BP: Benzoyl peroxide
LFT: Liver function test

https://www.aad.org/member/clinical-quality/guidelines/acne

*J Am Acad Dermatol https://doi.org/10.1016/j.jaad.2023.12.017.*

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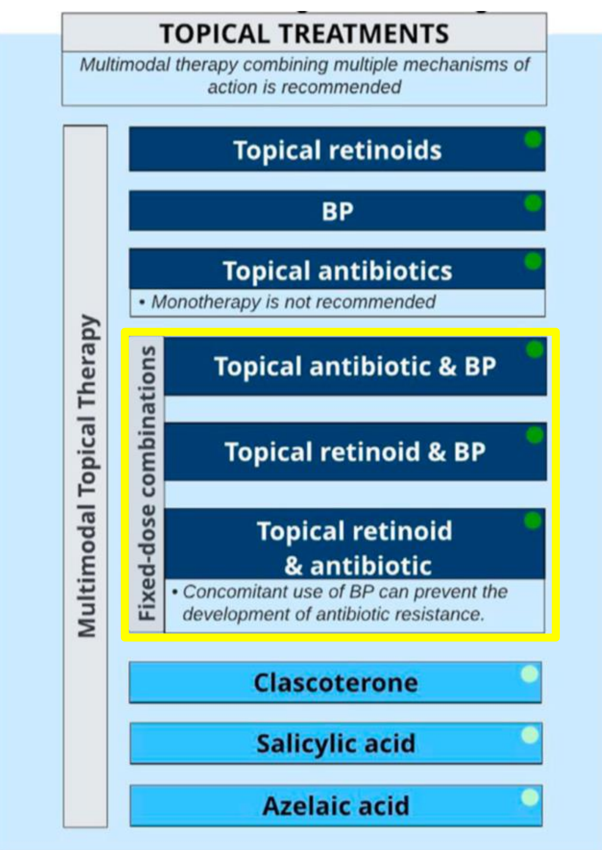
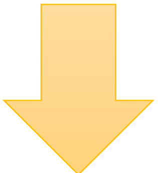
# TRATAMIENTO TÓPICO

## TRATAMIENTO TÓPICO COMBINADO




Recomendación a favor del uso de terapias tópicas en acné



COMBINACIÓN DE MÚLTIPLES MECANISMOS DE ACCIÓN

### Fixed Combination Therapies

- Adapalene 0.1%/ BP 2.5% gel
- Adapalene 0.3%/ BP 2.5% gel
- Tretinoin 0.025%/ Clindamycin 1.2% gel
- Tretinoin 0.1%/ BP 3% cream
- *Clindamycin 1.2%/ BP 3.1%/ Adapalene 0.15% gel

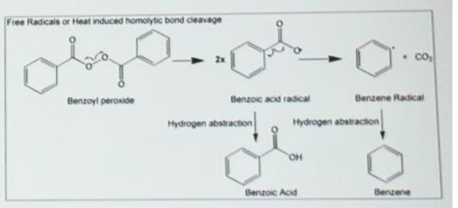
* New Fixed Combination Product

# ESPIRONOLACTONA EN ACNÉ

PERÓXIDO DE BENZOILO: recomendación a favor de su uso. Usar en asociación a AB orales para reducir resistencias

## Benzene in Benzoyl Peroxide

- Benzene is a known carcinogen
- 175 acne treatment products, 99 containing BPO and 76 containing other ingredient
- Benzene found when BP products incubated at 37°C (98.6°F ), 50°C (122°F ) and 70°C (158°F )
- 94 of 99 BPO products contained benzene without any elevated temperature incubation
- "Dozens of ppm of benzene can form in just a few weeks at 37°C"
- 18 days at 50°C, over 1,500 ppm of benzene produced in 2 products, over 100 ppm in 17 products, and over 10 ppm in 42 products
- Formulation changes can improve stability




**Recommendation:**

- Continue BP
- Tell patients to store at room temperature or lower
- Await independent verification of results
- Manufacturers to re-evaluate stability of BP products

Se incluyó como recomendación antes de que apareciese la alarma por la detección de **BENCENO** en el peróxido de benzoilo

En general requiere temperatura caliente para generarse benceno en el peróxido de benzoilo

Plantean la posibilidad de **mantenerlo en el frigorífico o temperatura ambiente** a la espera de resultados de otros estudios al respecto

# ESPIRONOLACTONA EN ACNÉ

## NUEVOS RETINOIDES

### Newer Topical Retinoids

- **Tretinoin 0.05% lotion**
  - RAR, RXR
  - Mean % change: 52% inflammatory and 46% noninflammatory
  - 18% EGSS success, 'clear' or 'almost clear'
  - Subgroup analysis in preadolescent (23.7% vs 7.2%) and females (23.6% vs 13.5%). Greater noninflammatory response in adult females
  - Efficacy of topical acne treatments not affected by BMI
- **Trifarotene 50 µg/g cream**
  - 4th generation retinoid
  - RAR γ selectivity
  - Moderate facial and truncal acne
  - Once daily, ≥ 9 years
  - IGA success 36.2% (vs 22.9%)
  - Week 52 IGA 65.1% and PGA 66.9%
- **Tazarotene 0.045% lotion**
  - RAR α β γ
  - Once daily, ≥ 9 years, Moderate to severe facial acne
  - Mean % change inflammatory 57.5% (vs 47.4%), noninflammatory 55.7% (vs 41.5%)
  - IGA success 28%, clear to almost clear
  - Improved perceived oiliness

Tyring SK, et al. Novel Tretinoin 0.05% Lotion for the Once-Daily Treatment of Moderate-to-Severe Acne Vulgaris: Assessment of Efficacy and Safety in Patients Aged 9 Years and Older. J Drugs Dermatol. 2018 Oct 1;17(10):1084-1091.
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Keri J, et al.. Efficacy and tolerability of three topical acne treatments by body mass index: post hoc analysis including overweight and obese patients. J Dermatolog Treat. 2022 Sep;33(6):2790-2799.
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Blume-Peytavi U, et al. Long-term safety and efficacy of trifarotene 50 µg/g

TRETINOINA EN LOCIÓN

- Mejor tolerancia que en crema

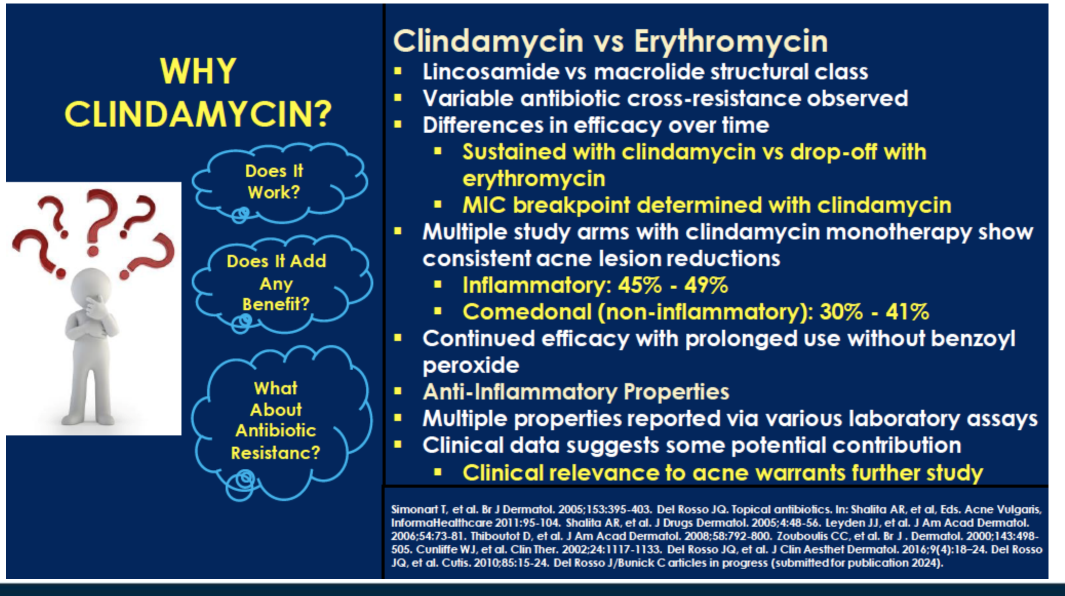
TRIFAROTENO

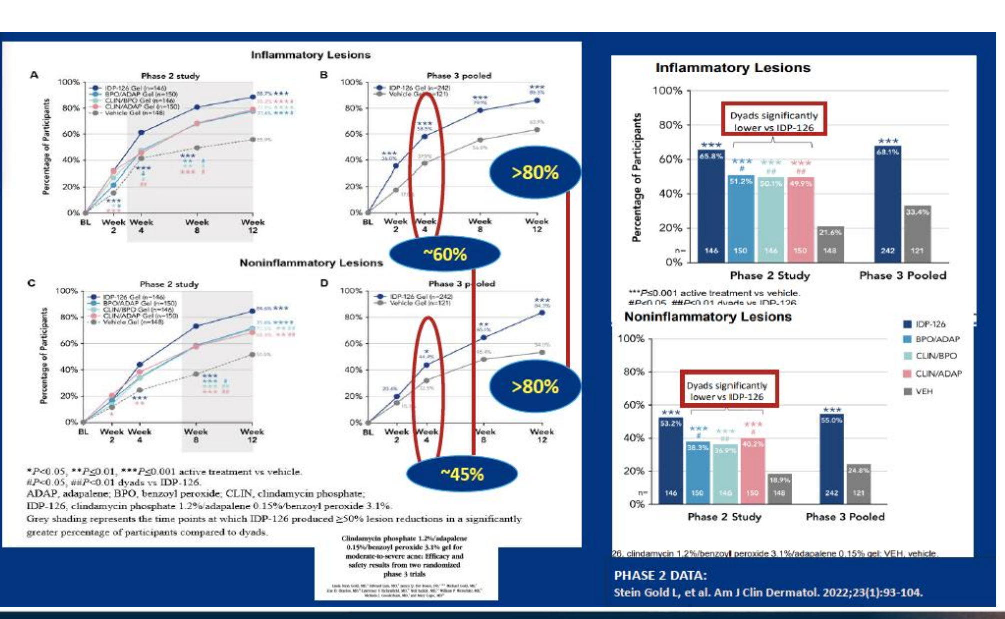
- Principalmente acné troncal
- Es seguro su uso en fototipos altos para mejorar la HPI por lesiones de acné

# TRATAMIENTO TÓPICO

## ANTIBIÓTICOS TÓPICOS

- GUÍA AAD 2023 → RECOMENDACIÓN FUERTE A FAVOR DEL USO DE AB TÓPICOS EN ACNÉ, **PERO NO EN MONOTERAPIA**
- Clindamicina = Antibiótico + antiinflamatorio + comedolítico // PB: antimicrobiano y comedolítico
- Aparente superioridad de **Clindamicina > Eritromicina** (mejor respuesta, eritromicina pierde eficacia a largo plazo)
- Se recomienda **uso combinado** (evitar monoterapia con AB por la aparición de resistencias, la combinación optimiza tto, mejor adherencia): Clindamicina 1.2% + PB 3.1% + Adapaleno 0,15% (combinaciones disponibles en USA)
- ANTIBIÓTICOS TÓPICOS EN FORMATO JABÓN / LIMPIADOR → **Jabón de Minociclina 4%**, **Gel de DAPSONA (5% y 7,5%)** → dudas sobre si el tiempo de contacto es suficiente para un efecto adecuado



## ANTIANDRÓGENOS TÓPICOS

### Clascoterone 1% cream

$C_{24}H_{34}O_5$

- ≥12 years, males and females
- Moderate to severe acne
- Twice daily
- ? Compete with the androgen DHT for binding to androgen receptors in the sebaceous gland and hair follicles
- Pooled results
  - Treatment success 19.9% vs 7.7% vehicle


Hebert A, et al. Efficacy and Safety of Topical Clascoterone Cream, 1%, for Treatment in Patients With Facial Acne: Two Phase 3 Randomized Clinical Trials. *JAMA Dermatol.* 2020;156(6):621-630.
Hebert A, et al. Efficacy and Safety of 1% Clascoterone Cream in Patients Aged > 12 Years With Acne Vulgaris. J Drugs Dermatol. 2023 Feb 1;22(2):174-181.
Eichenfield L, et al. Open label, long term extension study to evaluate the safety of clascoterone (CB-03-01) cream, 1% twice daily, in patients with acne vulgaris. J Am Acad Dermatol. 2020 Aug;83(2):477-485.


### Phase III trials support safety and efficacy

- ~20% IGA success (vs ~8% vehicle)
- ~45% decrease in inflammatory papules/pustules (vs ~32% vehicle)
- ~30% decrease in comedonal lesions (vs ~17% vehicle)
- Minimal side-effects: ~0.6% discontinued due to adverse effects (vs ~1.5% vehicle)
- Adrenal suppression (due to metabolism to cortexolone)
  - In Phase II study using 6g application, 7% with abnormal HPA response, but none with symptoms


Hebert A, et al. JAMA Dermatol. 2020;156(6):621-630


RECOMENDACIÓN CONDICIONAL: evidencia a favor, pero limitación por PRECIO ELEVADO

Clascoterona 1% en crema: aplicación c/12h
Antiandrógeno tópico, >12 años tanto hombres como mujeres

Tasa de respuesta:

- 20% a corto plazo
- 30% a los 6 meses
- Eficacia similar a tretinoína (gráfico)

Tasa de eventos adversos (leves):

- 18% en grupo de tratamiento = 18% en grupo placebo

### Clascoterone may be as effective as tretinoin

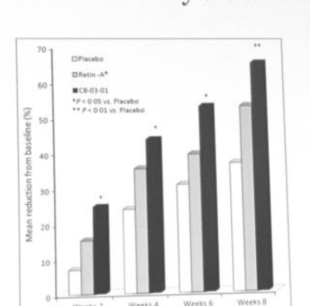



Fig 1. Improvement in total lesion count.

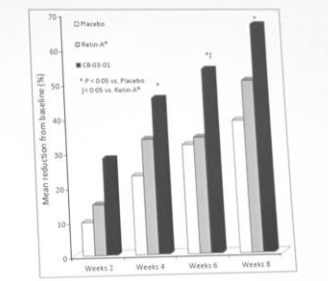



Fig 2. Improvement in inflammatory lesion count.


Trifu, et al. BJD. 2011 165, pp177–183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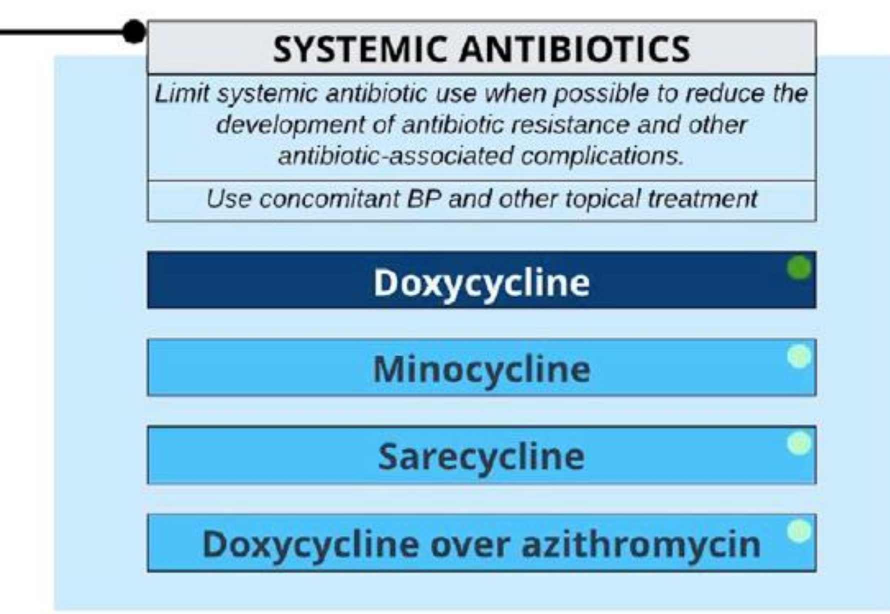
# ANTIBIÓTICOS ORALES ACNÉ / ROSÁCEA

- GUÍAS CLÍNICAS AAD 2024 PARA EL TRATAMIENTO DEL ACNÉ



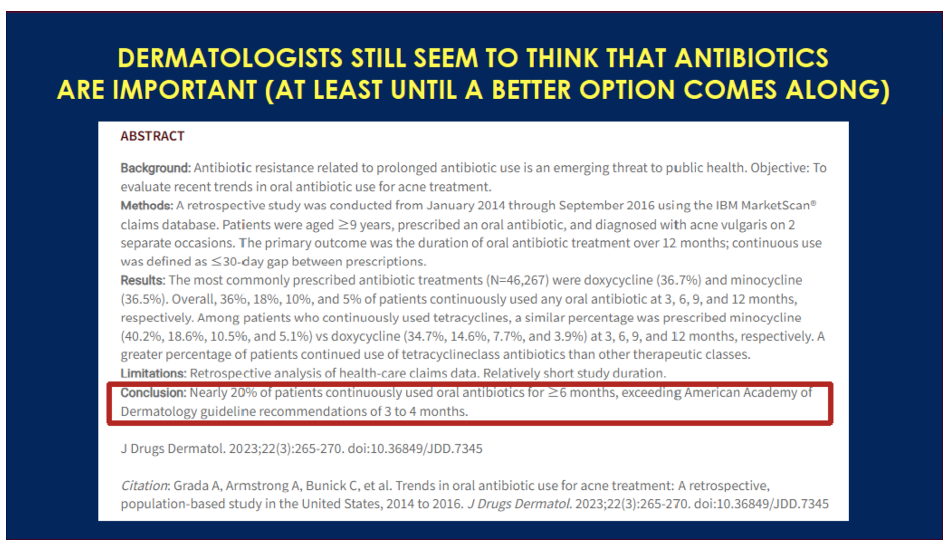

ANTIBIÓTICOS ORALES:

- Sí, pero no en monoterapia
- Uso concomitante de peróxido de benzoilo +/- otros tópicos para reducir resistencias
- Mínimo tiempo posible (no más de 3-4 meses)
- Asociar PROBIÓTICOS 2h antes de la toma (podría mejorar el efecto AB por cambios en microbiota, recude efectos adversos gastrointestinales)

# ANTIBIÓTICOS ORALES

## ANTIBIÓTICOS ORALES EN EL TRATAMIENTO DEL ACNÉ

- Uso habitual en dermatología, por encima de lo recomendado
- Recomendación fuerte: **DOXICICLINA**
- Recomendación condicional: **MINOCICLINA** (riesgo AEs), **SARECICLINA (limitación: PRECIO,** pero globalmente menos efectos adversos asociados a tetraciclinas al ser más selectiva de GRAM positivos)

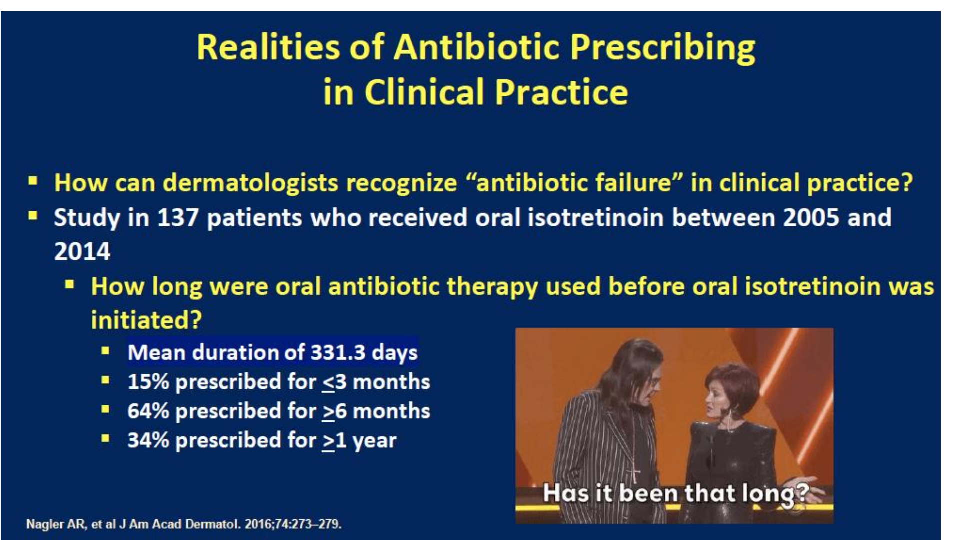



ABSTRACT

**Background:** Antibiotic resistance related to prolonged antibiotic use is an emerging threat to public health. Objective: To evaluate recent trends in oral antibiotic use for acne treatment.
**Methods:** A retrospective study was conducted from January 2014 through September 2016 using the IBM MarketScan® claims database. Patients were aged ≥9 years, prescribed an oral antibiotic, and diagnosed with acne vulgaris on 2 separate occasions. The primary outcome was the duration of oral antibiotic treatment over 12 months; continuous use was defined as ≤30-day gap between prescriptions.
**Results:** The most commonly prescribed antibiotic treatments (N=46,267) were doxycycline (36.7%) and minocycline (36.5%). Overall, 36%, 18%, 10%, and 5% of patients continuously used any oral antibiotic at 3, 6, 9, and 12 months, respectively. Among patients who continuously used tetracyclines, a similar percentage was prescribed minocycline (40.2%, 18.6%, 10.5%, and 5.1%) vs doxycycline (34.7%, 14.6%, 7.7%, and 3.9%) at 3, 6, 9, and 12 months, respectively. A greater percentage of patients continued use of tetracyclineclass antibiotics than other therapeutic classes.
**Limitations:** Retrospective analysis of health-care claims data. Relatively short study duration.
**Conclusion:** Nearly 20% of patients continuously used oral antibiotics for ≥6 months, exceeding American Academy of Dermatology guideline recommendations of 3 to 4 months.

J Drugs Dermatol. 2023;22(3):265-270. doi:10.36849/JDD.7345

*Citation:* Grada A, Armstrong A, Bunick C, et al. Trends in oral antibiotic use for acne treatment: A retrospective, population-based study in the United States, 2014 to 2016. *J Drugs Dermatol.* 2023;22(3):265-270. doi:10.36849/JDD.7345




Cerca del 20% de pacientes utilizaron antibióticos >6 meses en 2023

# ISOTRETINOÍNA

- RIESGO DE SUICIDIO

**ISOTRETINOIN**

**Isotretinoin**
- *Patients with psychosocial burden or scarring should be considered candidates for isotretinoin.*
- *We recommend monitoring only LFT and lipids*
- *Population-based studies have not identified increased risk of neuropsychiatric conditions or inflammatory bowel disease with isotretinoin.*
- *For persons of pregnancy potential, pregnancy prevention is mandatory.*

**Daily dosing over intermittent dosing**

**Either lidose-isotretinoin or standard isotretinoin**

What does this mean?

Isotretinoin likely is associated with rare, idiosyncratic, meaningful negative effects on mood for some individuals

However, on average, isotretinoin improves mood compared to other acne treatments, likely due to its high efficacy in treating acne

We should not be afraid to use isotretinoin in patients with a history of mental health issues, especially if these are related to acne itself

Original Investigation

November 29, 2023

**Risk of Suicide and Psychiatric Disorders Among Isotretinoin Users**

A Meta-Analysis

Nicole Kye Wen Tan[1]; Adelina Tang[1]; Neil Chen Yi Lun MacAlevey[1]; et al

Author Affiliations | Article Information

*JAMA Dermatol.* 2024;160(1):54-62. doi:10.1001/jamadermatol.2023.4579

Metaanálisis JAMA 2023:
- 24 estudios, 1.625.891 pts 16-38 yo
- Riesgo de suicidio parece ser menor entre usuarios que entre no usuarios de isotretinoína (a los 2, 3 y 4 años)

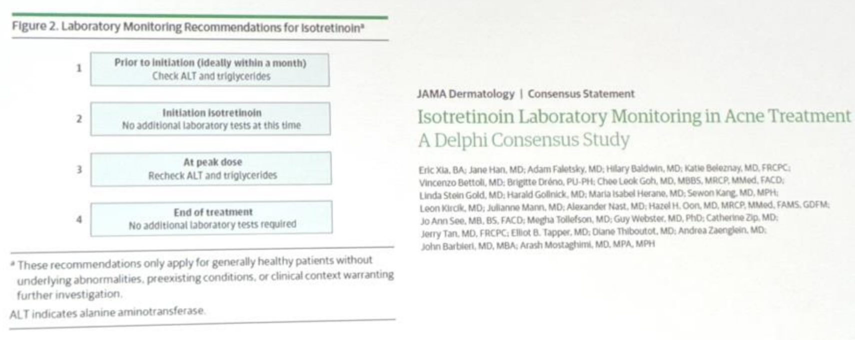
# ISOTRETINOÍNA

- CONTROL ANALÍTICO

**Again, it does not appear checking LFTs will help us avoid hepatotoxicity, as this is non-existent**

- Following approval of Isotretinoin in 1982, only one case of possible DILI has been reported.
- Thus, routine LFT monitoring is of limited value as there is unlikely to be meaningful risk of hepatic injury (if at all), it is unclear if monitoring LFTs could prevent risk (similar to terbinafine), and there will be a high rate of false positives.

**Results of an international Delphi consensus support a more limited approach to laboratory monitoring**




**Proposed monitoring pattern**

- No evidence to support checking a complete blood count
- Consider checking LFTs (i.e. ALT) and Lipid Panel (i.e. triglycerides) at baseline and peak dose
  - Reasonable to offer no monitoring to a patient after discussing risks and benefits of monitoring
- Savings >$100-200M/year in the United States are possible

- No pedir hemograma
- ALT, AST y colesterol y TG BASAL y en MÁXIMA DOSIS
- Es razonable no hacer control analítico discutiendo con el paciente riesgo / beneficio

# ISOTRETINOÍNA

## PERSONAS TRANSGÉNERO EN TERAPIA MASCULINIZADORA

- El uso de isotretinoína en esta población parece seguro, aunque menos eficaz y con mayor tasa de recurrencia que en población cis
- Las alteraciones analíticas aparecen en un porcentaje similar a la población cis

### Isotretinoin for Management of Acne in Transgender Individuals Receiving Masculinizing Hormone Therapy: A Multicenter Case Series

James Choe, BS[1]; Alana Ferreira, BS[2]; Sarah Gold, BA[3]; Jeromy W. Gotschall, BA[2]; Kanika Kamal, BA[1,4]; Austin Rios, BS[5,6]; Robin H. Wang, MD[2]; Emily Baumrin, MD[7]; Erica D. Dommasch, MD, MPH[4,5,6]; Howa Yeung, MD, MSc[8]; Jules B. Lipoff, MD[9]; John Barbieri, MD, MBA[1]

[1]Department of Dermatology, Brigham and Women's Hospital, Harvard Medical School, Boston, MA; [2]Perelman School of Medicine, University of Pennsylvania, Philadelphia, PA; [3]Emory University School of Medicine, Atlanta, GA; [4]Harvard Medical School, Boston, MA; [5]The Fenway Institute, Fenway Health, Boston, MA; [6]Department of Dermatology, Beth Israel Deaconess Medical Center, Harvard Medical School, Boston, MA; [7]Department of Dermatology, Perelman School of Medicine, University of Pennsylvania, Philadelphia, PA; [8]Department of Dermatology, Emory University School of Medicine, Atlanta, GA; [9]Department of Dermatology, Lewis Katz School of Medicine, Temple University, Philadelphia, PA

#### Conclusion

- Isotretinoin is an effective and well-tolerated treatment option for acne among individuals undergoing masculinizing GAHT
- Treatment with isotretinoin demonstrates reduced rates of clearance and slightly higher rates of recurrence than in other populations[4]
- Frequent early discontinuation of treatment highlights treatment barriers to the use of isotretinoin in transgender individuals, consistent with existing health disparities[5]
- The side effect profile of isotretinoin in individuals undergoing masculinizing GAHT is similar to those reported in other populations[6]
- Laboratory testing demonstrates comparable rates of abnormalities as in the broader population[7]
- Future work is needed to better understand optimal dosing and treatment barriers to improve outcomes for individuals undergoing masculinizing GAHT

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# TRATAMIENTO ANTIANDRÓGENO

## ANTICONCEPTIVOS ORALES

Androgenicity

| 1st Generation (Estranes) | 2nd Generation (Gonanes) | 3rd Generation (Gonanes) | 4th Generation (Antiandrogenic) |
|---|---|---|---|
| Norethindrone | Levonorgestrel | Desogestrel | Cyproterone Acetate (17-hydroxyprogesterone derived) Not available in U.S.A. |
| Ethynodiol diacetate | Norgestimate | Gestodene | Drospirenone (DRSP) (17-alpha spironolactone derived) |
| 19-Nortestosterone derived | 19-Nortestosterone derived | 19-Nortestosterone derived | |

Net effect of *all combined OCPs* is antiandrogenic due to estrogen component

*FDA Approval specifies treatment of acne in women who also desire contraception, risk of blood clots higher in pregnancy than with OCPs.

ORAL CONTRACEPTIVES AND ACNE

- 4 OCP's are FDA approved for acne but it is likely that all OCP's that are combinations of estrogen and progestin help
- Progestin only mini pills usually don't help and may worsen acne
- What about the new drospirenone only pill??

ACOS de más a menos potencia androgénica

Eficacia similar a antibióticos orales (alternativa para reducir su uso)

En recuadro rojo los que se recomiendan en tratamiento del acné

EVITAR ACOs con progestágeno aislado

**Drospirenona 3mg = Espironolactona 25mg (y pueden usarse combinados)**

# TRATAMIENTO ANTIANDRÓGENO

## ANTICONCEPTIVOS ORALES - CONTRAINDICACIONES

### cOCP Contraindications

Absolute vs Relative—see details in Table IV of guidelines

Pregnancy, early breastfeeding

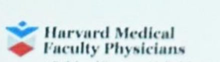
Smokers, obesity, hypertension >35

- h/o DVT, PE h/o stroke, CAD, CHF, immobilization
- Family history of thrombosis
- Hypertriglyceridemia
- Migraine with aura, or without aura >35
- Liver disease
- Diabetes—advanced or >20 yrs
- SLE with vascular disease

ACOG practice bulletin; no. 73; 2006

Arrington et al., Cutis 2012

Reynolds RV et al. JAAD 2023 Acne Guidelines



# ESPIRONOLACTONA EN ACNÉ

**HORMONAL AGENTS**

**Combined oral contraceptives**

**Spironolactone**

- *Potassium monitoring is of low usefulness in patients without risk factors for hyperkalemia (e.g., older age, medical comorbidities, medications).*

**Intralesional corticosteroids**

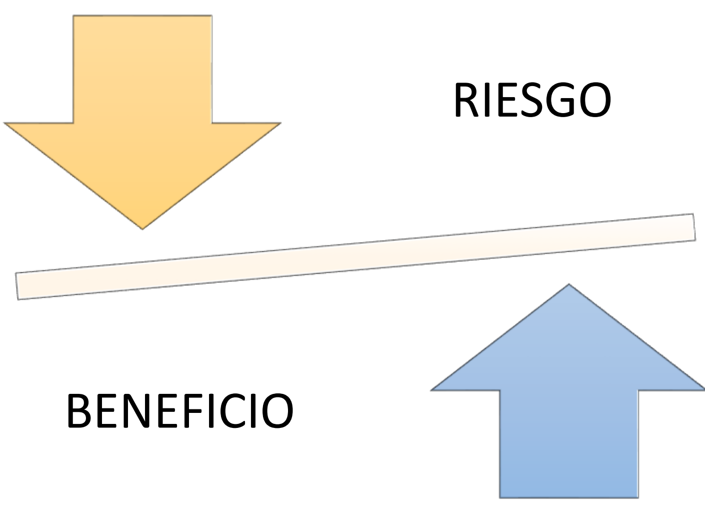
- *Adjuvant treatment for larger acne papules or nodules at risk of acne scarring or for rapid improvement in inflammation and pain.*

## AAD Guidelines: Spironolactone for Acne

| Publication Year | Strength of Recommendation |
|---|---|
| 2016 | • Recommendation based on inconsistent or limited quality patient-oriented evidence<br>• Recommendation based on consensus, opinion, case studies or disease-oriented evidence |
| 2024 | • Conditional: Workgroup believes the benefits are closely balanced with risks and burden<br>• Workgroup believes most people would want the recommended course of action<br>• Moderate certainty of evidence |

Zaenglein AL et al. J Am Acad Dermatol 2016; 74: 945. Reynolds RV et al. J Am Acad Dermatol 2024; in press

Con respecto a 2016, ahora la recomendación es a favor aunque “condicional”: beneficio equiparable al riesgo



# ESPIRONOLACTONA EN ACNÉ

## Spironolactone and pregnancy/nursing

- Spironolactone is pregnancy category C
  - Spironolactone should NOT be used during pregnancy
  - Increased risk of hypospadias and feminization of the male fetus
- Spironolactone's active metabolite canrenone has been found in breast milk but at 0.2% of the maternal dose. Both the AAP and the WHO classify spironolactone as compatible with lactation.

## Clinical Pearls

1. Higher side effects with higher doses
2. Menstrual irregularities are #1 side effect
3. Patients on contraceptives should have far fewer menstrual irregularities (?maybe increase the dose?)
4. Most women don't need K+ checked; check in those over 45
5. There is not a confirmed increase in breast cancer risk with spironolactone exposure
6. There is not an increased risk of VTE associated with spironolactone
7. Pregnant patients should not take spironolactone but it is considered compatible with lactation

**¿Es seguro su uso en embarazo y lactancia?**

Hay que suspenderlo en el embarazo por el riesgo de hipospadias

Es compatible con lactancia, aunque puede que no sea compatible en el contexto de AEs (aumento del volumen mamario, spotting y potencial reducción del volumen de leche por el efecto diurético)

# ESPIRONOLACTONA EN ACNÉ

## SEGURIDAD DEL USO DE ESPIRONOLACTONA

| Cancer | Estimates, No. | References | Certainty of evidence | Risk ratio (95% CI) |
|---|---|---|---|---|
| Bladder | 3 | Chuang et al,[29] 2017; Mackenzie et al,[13] 2017 | Very low | 0.89 (0.71-1.07) |
| Breast | 3 | Biggar et al,[11] 2013; Mackenzie et al,[13] 2017; Sabatier et al,[28] 2019 | Very low | 1.04 (0.86-1.22) |
| Gastric | 2 | Busby et al,[27] 2017; Mackenzie et al,[13] 2017 | Low | 1.02 (0.80-1.24) |
| Kidney | 3 | Chuang et al,[29] 2017; Mackenzie et al,[13] 2017 | Low | 0.96 (0.85-1.07) |
| Esophageal | 2 | Busby et al,[27] 2017; Mackenzie et al,[13] 2017 | Low | 1.09 (0.91-1.27) |
| Ovarian | 2 | Biggar et al,[11] 2013; Mackenzie et al,[13] 2017 | Very low | 1.52 (0.84-2.20) |
| Prostate | 4 | Beckmann et al,[30] 2020; Chuang et al,[29] 2017; Hiebert et al,[31] 2021; Mackenzie et al,[13] 2017 | Very low | 0.79 (0.68-0.90) |

Favors reduced risk of cancer | Favors increased risk of cancer

0 0.5 1.0 1.5 2.0 2.5

Risk ratio (95% CI)

Revisión sistemática y meta-análisis de 7 estudios

No aumenta el riesgo de cáncer ginecológico en mujeres (ovario, mama), ni siquiera en el grupo de >55

No aumenta el riesgo de cáncer de vejiga, riñón, gástrico ni esofágico

Reduce el riesgo de cáncer de próstata en hombres

### Discussion

This systematic review and meta-analysis evaluated the potential association between spironolactone use and risk of cancer. In the primary analysis, we found no statistically significant associations between spironolactone use and breast, ovarian, bladder, kidney, gastric, or esophageal cancers. In addition, spironolactone use was associated with a decreased risk of prostate cancer. In light of the FDA-mandated warning cautioning that "unnecessary use of this drug should be avoided,"[9] these data are reassuring that treatment with spironolactone is unlikely to be associated with a meaningful increased risk of cancer when prescribed at typical clinical doses.

For patients with acne, spironolactone represents an important alternative to oral antibiotics.[4] While there have been concerns about use of spironolactone and the development of breast cancer, the results of this meta-analysis are reassuring. In addition, prior studies have suggested that use of oral antibiotics may be associated with an increased risk of breast and color cancers.[32-34] Taken together, these findings suggest that spironolactone may have lower malignant potential compared with oral antibiotics for women with acne.

Ovarian cancer is a hormone-sensitive cancer that could be postulated to be increased with spironolactone use. Although Biggar et al[11] found an increased risk of ovarian cancer among women treated with spironolactone, particularly within the first year of treatment, the results of this meta-analysis do not support a clear association between spironolactone use and ovarian cancer. Notably, Biggar et al found a similarly increased risk of ovarian cancer within the

Bommareddy K, Hamade H, Lopez-Olivo MA, Wehner M, Tosh T, Barbieri JS. Association of Spironolactone Use With Risk of Cancer: A Systematic Review and Meta-analysis. JAMA Dermatol. 2022 Mar 1;158(3):275-282

# ESPIRONOLACTONA EN ACNÉ

## SEGURIDAD DEL USO DE ESPIRONOLACTONA EN PACIENTES CON CÁNCER DE MAMA Y TERAPIA HORMONAL

Revisión sistemática de 47 estudios

Espironolactona y los inhibidores de 5-alfa-reductasa NO interaccionan con la terapia hormonal del cáncer de mama

Los niveles de estrógenos:

- **Aumentan en 26%** → hipotéticamente aumentaría el riesgo de cáncer hormonodependiente (mama y ovario)
- Se reducen en 6.3%
- No cambian en 67%

*No se especifica el momento del ciclo en el que se hace la medición

GLOBALMENTE SE CONSIDERA SEGURO SU USO COMO TRATAMIENTO DE LA ALOPECIA INDUCIDA POR TERAPIA HORMONAL (SIMILAR A FAGA)


Review > Breast Cancer Res Treat. 2019 Feb;174(1):15-26. doi: 10.1007/s10549-018-4996-3. Epub 2018 Nov 22.


**Safety of 5α-reductase inhibitors and spironolactone in breast cancer patients receiving endocrine therapies**


Raquel N Rozner [1], Azael Freites-Martinez [1], Jerry Shapiro [2], Eliza B Geer [3], Shari Goldfarb [4], Mario E Lacouture [5]

Affiliations + expand



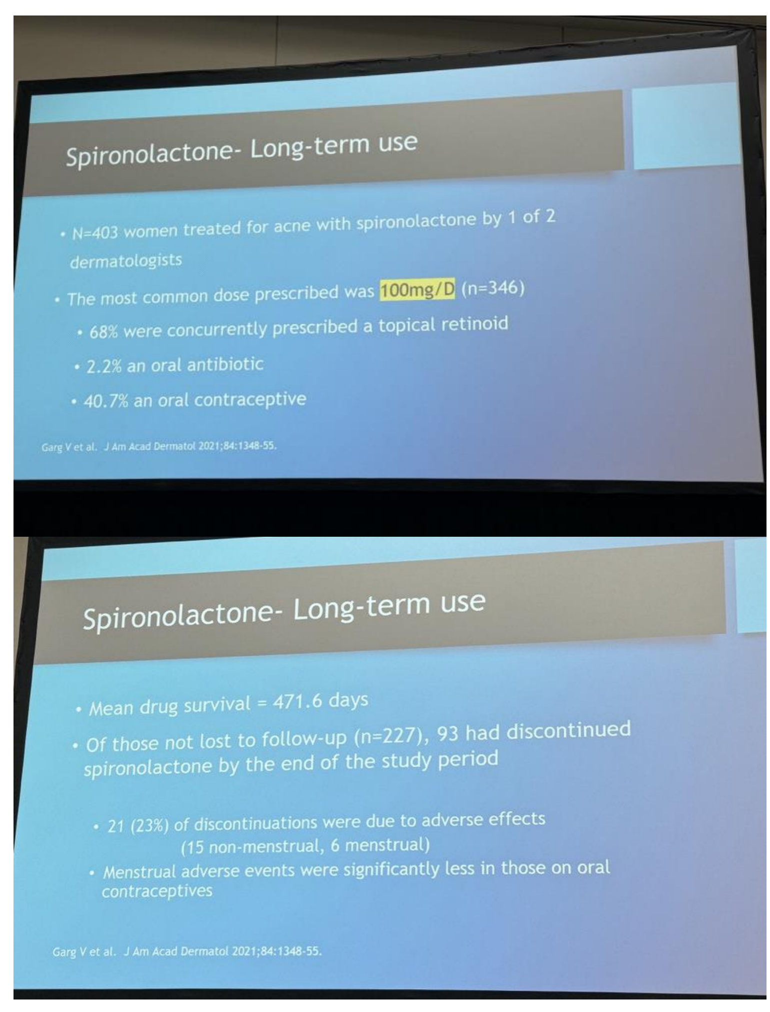
PMID: 30467659 PMCID: PMC6773272 DOI: 10.1007/s10549-018-4996-3

Free PMC article


To date, no study has shown a significant increased risk of incident female breast cancer while using spironolactone. There are no controlled or long-term studies assessing AEs of spironolactone in female breast cancer patients or on any risk of breast cancer recurrence with the use of this systemic therapy for female AGA. The consequences of altered estrogen levels related to treatments also remains unclear. Despite documented treatment successes and failures with increased popularity of use, spironolactone has the potential to be used as relatively safe systemic treatment options for the management of EIA in female breast cancer patients and survivors on ET who respond poorly to monotherapy with topical minoxidil.


Rozner RN, Freites-Martinez A, Shapiro J, Geer EB, Goldfarb S, Lacouture ME. Safety of 5α-reductase inhibitors and spironolactone in breast cancer patients receiving endocrine therapies. Breast Cancer Res Treat. 2019 Feb;174(1):15-26.

# ESPIRONOLACTONA EN ACNÉ




**TRATAMIENTO A LARGO PLAZO**

EN GENERAL EL TRATAMIENTO CON ESPIRONOLACTONA SE PLANTEA A LARGO PLAZO (1-3 AÑOS)

La dosis más habitual es 100mg/d

Uso combinado:

- 68% retinoide tópico concomitante
- 2.2% antibiótico oral concomitante
- 40.7% ACOs → reduce el % de eventos adversos (irregularidad menstrual)

# ESPIRONOLACTONA EN ACNÉ

HIPERKALEMIA

**Spironolactone and K+**

Check K+ if:

- ✓Older age
- ✓Hx of renal or cardiac disease
- ✓Hx of impaired hepatic function (minor alterations of fluid and electrolyte balance may precipitate hepatic coma)
- ✓Higher doses of spironolactone (200mg/day)

Spironolactone is not FDA-approved for the treatment of acne

**Spironolactone and K+**

- Check K+ if on certain medications:
  - ACE inhibitors
  - Angiotensin II antagonists
  - Aldosterone blockers
  - NSAIDS (i.e. indomethacin)
  - Salt substitutes
  - K+ supplementation
  - Trimethoprim/sulfamethoxazole

- No requiere control analítico de rutina en pacientes <45 años sanos
- Si elevación analítica: repetir (no suele cambiar actitud terapéutica)
- Controlar en >45 años o con otros factores de riesgo

# DIETA Y ACNÉ

## ACNE and DIET

-Available evidence is conflicting on Low-glycemic load diet for acne vulgaris:

-RCT of 45 patients→greater reduction in facial acne score was seen in a LGL diet vs HGL diet at 8 wks (change from baseline)

-RCT of 32 Korean patients→improvement in Leeds Revised Acne score at 12 wks on a LGL diet, but NOT in Control group

-RCT of 43 Australian patients→greater reduction in total lesion count in a LGL diet vs a HGL diet at 12 weeks (change from baseline)

-RCT of 84 patients→the addition of a LGL diet in patients starting BP 2.5% gel did not result in significant differences in acne lesion counts

## ACNE and DIET

Available evidence is insufficient to develop a recommendation on the use of the following on acne treatment:

-Low diary diet
-Low whey diet
-Omega-3 fatty acids
-Chocolate

Se incluyeron 7 artículos para elaborar las guías clínicas de manejo del acné AAD 2024

Globalmente NO PUEDEN HACERSE RECOMENDACIONES DIETÉTICAS PARA ACNÉ BASANDOSE EN LA EVIDENCIA PRESENTE

**La evidencia sobre dieta de bajo índice glicémico es baja**

No se puede recomendar en contra ni a favor de omega 3, dieta hipocalórica, dieta baja en lácteos, ni baja en chocolate

# DIETA Y ROSÁCEA

DIETA MEDITERRÁNEA Y ROSÁCEA

**MEDITERRANEAN DIET COULD IMPROVE THE RESPONSE TO TREATMENT IN ROSACEA PATIENTS: OBSERVATIONAL AND CROSS-SECTIONAL STUDY IN 92 PATIENTS**

Oteiza Rius I, España A, Gil Sánchez MP, Aguado Gil L, Salido Vallejo R, Antoñanzas J, Morelló Vicente A, Gómez González Elisa María, Rodríguez Garijo N. Dermatology Department of Clínica Universidad de Navarra, Spain.

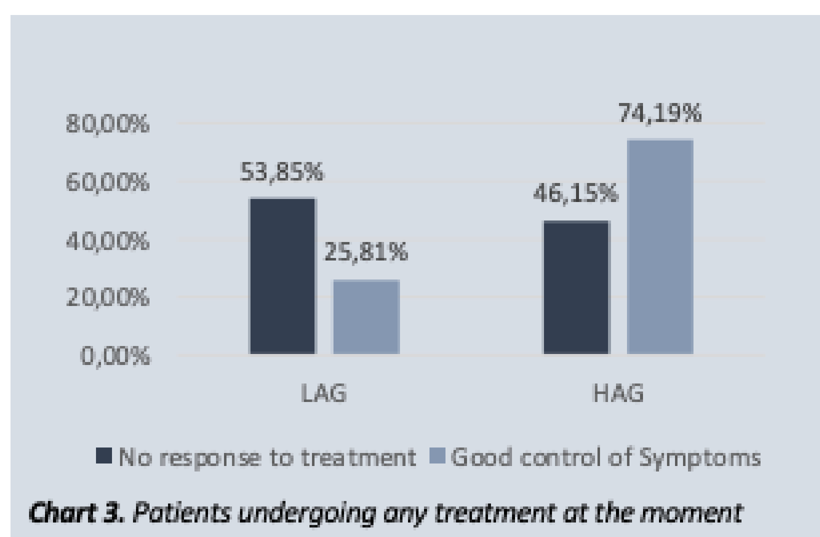


***Chart 3.** Patients undergoing any treatment at the moment*

No ven diferencias significativas en la respuesta a tratamientos orales entre ambos grupos

En el grupo de pacientes con ALTA adherencia a la dieta mediterránea se aprecia mejor control de los síntomas de rosácea que en el grupo con BAJA adherencia (independiente del tipo de tratamiento)

# TERAPIAS ALTERNATIVAS

TERAPIAS ALTERNATIVAS EN ACNÉ

1) Árbol del té
2) Té verde
3) Niacinamida

En la mayoría de casos ensayos con N baja

Los resultados “sugieren” algún efecto pero p>0.05

De las 3 sustancias mencionadas, la que muestra mayor evidencia es la Niacinamida, aunque una vez más, no muestra mejoría significativa respecto al resto

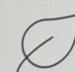
AAD

Conclusion from the 2024 Acne vulgaris guidelines

Available evidence is insufficient to develop a recommendation on the use of topical tea tree oil, topical green tea, topical witch hazel, oral pantothenic acid, oral or topical zinc, oral or topical niacinamide for acne treatment

AAD

Take Home Points



Complementary and Alternative therapies for the treatment of acne vulgaris **show promise however more research is needed** to fully understand the benefits and side effects of these treatment options

Recommendations for these treatments must be done at the **physician's discretion** and **represent the patients goals** for treatment.

We encourage you to advice your patients that opt to use these treatments to make sure that they are **well informed** prior to starting and to **stop immediately** if any adverse effects are noticed.

*Puede ser que el Green*

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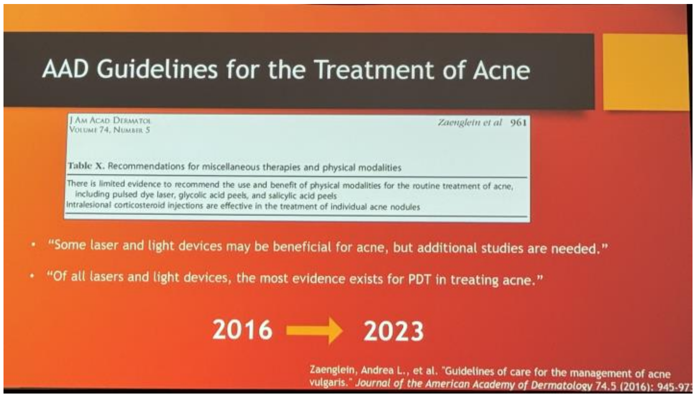
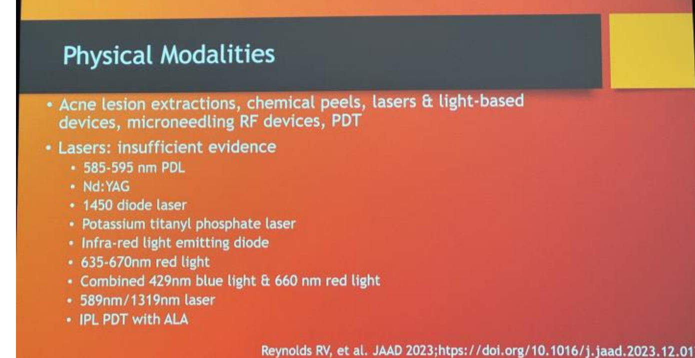
# TERAPÉUTICA FÍSICA (LÁSER, PEELINGS, FUENTES DE LUZ)

¿QUÉ DICE LA GUÍA CLÍNICA DE MANEJO DE ACNÉ AAD 2024?

2016




2024




- Recomendaciones muy limitadas en cuanto a terapéutica física (por falta de evidencia científica de calidad)

**PHYSICAL MODALITIES**

**Pneumatic broadband light added to adapalene** (●)

**Key:**

- ● Strong recommendation in favor of the intervention
- ● Conditional recommendation in favor of the intervention
- ● Strong recommendation against the intervention
- ● Conditional recommendation against the intervention

**Abbreviations:** **BP:** Benzoyl peroxide
**LFT:** Liver function test

# TERAPÉUTICA FÍSICA

TERAPIAS FÍSICAS EN ACNÉ – GUÍAS AAD 2023

Insufficient evidence for recommendation

**Physical modalities**

- acne lesion/comedo extraction
- chemical peels*
- laser and light-based devices*
- photodynamic therapy
- microneedle radiofrequency device

RESUMEN

**A FAVOR**

1. CTC intralesional
   - BAJA concentración
   - BAJO volumen
2. TERAPIA FOTODINÁMICA

**EN CONTRA**

- Pneumatic broadband light + adapalene

**INSUFICIENTE EVIDENCIA**

- Resto de tratamientos

# ESPIRONOLACTONA EN ACNÉ

TERAPIAS FÍSICAS EN ACNÉ

## Positive outcome interventions*

*overall certainty of effects* moderate or higher AND *balance between benefits and harm* favors the intervention

**Devices**

1. Combined 420 nm blue + 660 nm red light (vs control)
2. 595 nm pulsed dye laser (vs control)
3. Pulse dye laser (vs combined 585 / 1064 nm laser)
4. Pulse dye laser plus isotretinoin (vs isotretinoin)

**Peels**

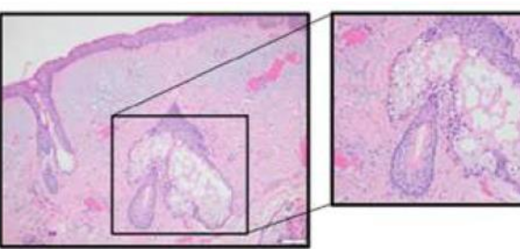
1. Glycolic acid 40% (vs control)
2. Salicylic acid 30% vs Jessner's solution: salicylic acid 30% > Jessner's solution

- Luz azul 420nm + luz roja 660nm podría tener un papel (superior a control)
- PDL es superior al 585/1064nm combinado
- PDL + iso 0.2-0.5 mg/kg >> isotretinoína monoterapia
- Peelings: salicílico 30% > Jessner´s solution

# TERAPÉUTICA FÍSICA (LÁSER, PEELINGS, FUENTES DE LUZ)

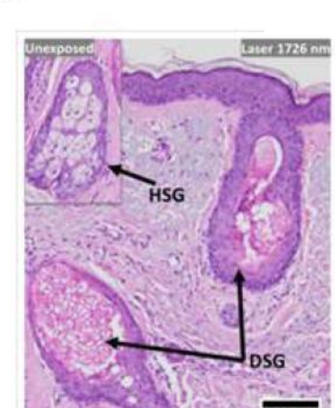
## 1726 nm Laser made by Cutera

- Power:100 W
- Pulse Duration: <50ms
- Spot Size: 3mm



Selective necrosis of Sebaceous Glands leaving surrounding tissue viable

**Selective photothermolysis with a novel 1726 nm laser beam: A safe and effective solution for acne vulgaris**
David Goldberg MD, FAAD, Amogh Kothare MS, Margot Doucette BSc, Arshdeep Kaur MS, Stephen Ronan MD, Jeffrey Fromowitz MD, FAAD, Amer Hamidi-Sakr PhD




## AviClear Study – Results

Inflammatory Lesion Count at Baseline:

61.4 Mean (23 to 100) PP from K213461 510(k)

ILC Reduction from Base Line:

49.4% (mean) at 3 months from K213461 510(k)

NILC Reduction from Base Line:

31.7% (median) at 3 months from Alexiades et al, JAAD Blue

43.9% (median) at 6 months from Alexiades et al, JAAD Blue

57.6% (median) at 12 months from K230660 510(k)

3 months / 6 months / 2 years — Severe / Mild / Almost Clear

## Safety[3]

- Treatment was safe for all skin types
  - No incidences of hypo- or hyperpigmentation
- Erythema and edema typically resolved within an hour.
- No prolonged effects and no adverse events were seen in clinical studies

| MILD SIDE EFFECTS | INCIDENCE (%) |
|---|---|
| Erythema | 100% |
| Edema | 98% |
| Acne flareups | 42% |
| Dryness | 18% |
| Itchiness | 2% |

# TERAPÉUTICA FÍSICA (LÁSER, PEELINGS, FUENTES DE LUZ)

HIPERPIGMENTACIÓN POSTINFLAMATORIA POR ACNÉ EN FOTOTIPOS ALTOS

## Persistent Post-Acne Pigmentation

- Etiology – residual hyperpigmentation which tends to persist months, if not years after the original lesion has resolved
  - Severity proportional to inflammation
  - STUDIES HAVE SHOWN - OFTEN MORE DISTRESSING THAN THE ACNE ITSEF
- Treatment
  - Retinoids
  - Combination Topical Bleaching agents
    - hydroquinone
- QS or Picosecond 1064 nm ND:YAG
  - Subthermal fluences (laser toning)
- Chemical Peels
  - Salicylic Acid
  - Jessners or modified jessners peels
  - TCA 10-15%

Recomiendan fluencias bajas “laser toning”

Asociar tratamientos tópicos despigmentantes

# TERAPÉUTICA FÍSICA (LÁSER, PEELINGS, FUENTES DE LUZ)

HIPERPIGMENTACIÓN POSTINFLAMATORIA POR ACNÉ EN FOTOTIPOS ALTOS

1. PREDICCIÓN DEL RIESGO DE PIH SEGÚN EL COLOR DE LAS CRESTAS PALMARES (Leal-Silva H et al, 4 grados)
2. POSIBILIDAD DE AÑADIR ÁCIDO TRANEXÁMICO ORAL O INTRALESIONAL PRE / POST TRATAMIENTO CON LÁSER QS (falta evidencia a favor, mejorías leves en el grupo de tratamiento oral / il)

ORIGINAL CONTRIBUTION

WILEY

Predicting the risk of postinflammatory hyperpigmentation: The palmar creases pigmentation scale

Hector Leal-Silva MD, PhD[1,2,3]

- Evaluation of the risk or degree of post-procedure PIH based on the color of the patient's palmar creases
- Validated scale classifies individuals into 4 groups (0-3)
- 0 and 1 = low risk
- 2 and 3 = high risk
- Darker the palmar creases, the greater the incidence of PIH

PIH Prevention: Oral TXA and Lasers

- Prospective randomized study of 32 Japanese women received TXA 650 mg qd prior to Q-switched ruby laser for SL treatment (Kato H, Dermatol Surg 2011:37(5):605-610)
  - No significant difference between Rx group and placebo group
- Prospective randomized study of 40 patients that received TXA 1500 mg qd prior to Q-switched 532 Nd:YAG laser for SL treatment (Rutnin S, Lasers Surg Med 2019;51(10):850-858)
  - No significant difference in PIH prevention; post 6 weeks TXA cleared faster
- Single dose of intradermal TXA 50 mg/mL vs. saline injection post-Q-switched 532nm Nd:YAG laser for SL removal (Rutin S, et al. Lasers Surg Med 2019;51(10):850-858)
  - TXA was found to be mildly effective

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# TERAPÉUTICA FÍSICA (LÁSER, PEELINGS, FUENTES DE LUZ)

1. PÓSTER: tratamientos de acné en el embarazo, consenso DELPHI

Mass General Brigham

## The Development of Treatment Guidelines for Acne Vulgaris During Pregnancy and Lactation: A Delphi Consensus Study


Allison Yan MSc[1,2], Sophia Ly BA[1,3], Ahana Gaurav BA[1,4], Eric Xia BA[1,5], Priya Manjaly BA[1,5], Kanika Kamal BA[1,6], Ali Shields BA[1,7], John S. Barbieri MD MBA[1], Arash Mostaghimi MD MPH MPA[1]

[1]Department of Dermatology, Brigham and Women's Hospital, Boston, MA; [2]The Ohio State University College of Medicine, Columbus, OH; [3]University of Arkansas for Medical Sciences, Little Rock, AR; [4]Medical College of Georgia, Augusta, GA; [5]Boston University Chobanian & Avedisian School of Medicine, Boston, MA; [6]Harvard Medical School, Boston, MA; [7]Drexel University College of Medicine, Philadelphia, PA


## Round 1 Results

| | | Preconception & 1st Trimester | 2nd Trimester & 3rd Trimester | Lactation |
|---|---|---|---|---|
| Topical Treatments | Benzoyl Peroxide (BP) | INC* | INC* | INC* |
| | Azelaic Acid | INC* | INC* | INC* |
| | Beta-hydroxyacid (BHA) | INC | INC | INC |
| | Alpha-hydroxyacid (AHA) | INC | INC* | INC |
| | Topical Clindamycin | INC | INC | INC* |
| | Topical Erythromycin | CNR | INC | INC |
| | Topical Sodium Sulfacetamide | CNR | CNR | INC |
| | Topical Dapsone | CNR | CNR | EXC |
| | Topical Metronidazole | CNR | CNR | CNR |
| | Topical Tazarotene | EXC | EXC | CNR |
| | Other Topical Retinoids | EXC | CNR | INC |
| | Topical Clascoterone | CNR | EXC | CNR |
| Oral Treatments | Oral Tetracyclines | EXC | EXC | CNR |
| | Oral Azithromycin | INC | INC | INC* |
| | Oral Erythromycin | INC | INC | INC |
| | Oral Amoxicillin | INC | INC | INC* |
| | Oral Cephalexin | INC | INC | INC* |
| | Oral Clindamycin | CNR | CNR | CNR |
| | Oral Metronidazole | CNR | CNR | CNR |
| | Oral Trimethoprim-Sulfamethoxazole (TMP-SMX) | EXC | EXC | CNR |
| | Oral Corticosteroids | INC | INC | INC* |
| | Oral Spironolactone | EXC | EXC | INC |
| Procedures | Chemical Peel with BHA | CNR | CNR | CNR |
| | Chemical Peel with AHA | INC | INC | INC |
| | Chemical Peel with TCA | EXC | EXC | CNR |
| | Intralesional Corticosteroids | INC | INC* | INC* |
| | Light and Laser Therapies | INC | INC* | INC* |

*INC = consensus for inclusion reached, EXC = consensus for exclusion reached, CNR = consensus not reached*
**Greater than 90% consensus achieved for inclusion*

- 16 therapies reached agreement threshold for at least one time point in pregnancy
- 11 therapies did not reach consensus for at least one time point in pregnancy
- 8 therapies reached exclusion threshold for at least one time point in pregnancy

Department of Dermatology 4

## Conclusions & Next Steps

- The most recommended treatments across all time points in Round 1 were:
  - *Topical:* Benzoyl peroxide, azelaic acid, topical clindamycin
  - *Oral:* azithromycin, erythromycin, amoxicillin, cephalexin, corticosteroids
  - *Procedural:* chemical peel with AHA, intralesional corticosteroids, light and laser therapies
- Future rounds will better characterize which treatments providers consider first-line, second-line, etc. for different acne severity levels

# TERAPÉUTICA FÍSICA (LÁSER, PEELINGS, FUENTES DE LUZ)

## Evaluating the effectiveness of punch elevation for treating atrophic scars using 3D image analysis


Hyungrye Noh, Heeyeon Kim, Taemin Lee, Joon Ho Shim, Se Jin Oh, Jihye Park, Dongyoun Lee, Jong Hee Lee
Department of Dermatology, Samsung Medical Center, Sungkyunkwan University School of Medicine, Seoul, Korea


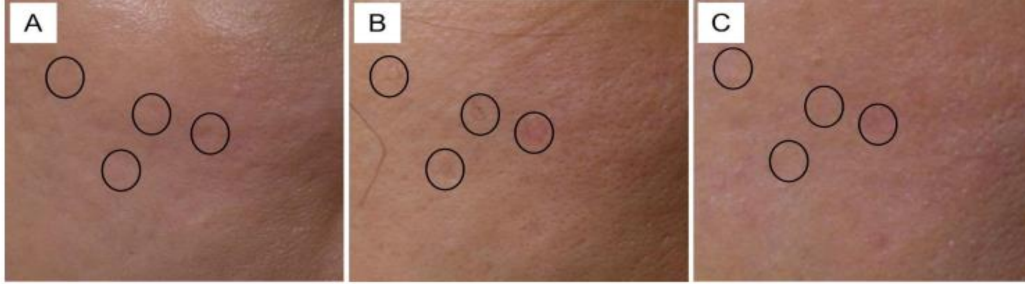


**Fig. 1. Atrophic scars in patient in the cheek**
(A) Before punch elevation. (B) Follow-up 1 month after punch elevation. (C) Follow-up 4 months after punch elevation. Round marks show the sites of punch elevation

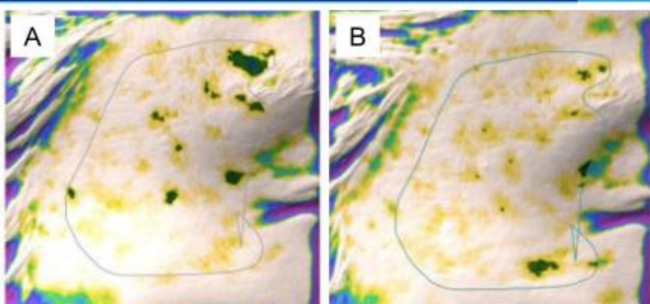


**Fig. 2. 3D image analysis of patient with atrophic scars.**
(A) Atrophic scars in a patient before punch elevation. (B) Follow-up 1 month after punch elevation.

- N = 7 casos
- Cicatrices deprimidas resistentes a tratamiento láser
- No comparan con subcisión
- Punch + CO2 de las lesiones
- Mejoría en la profundidad de las cicatrices tras el tratamiento
- Mejoría mantenida a los 4 meses

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La Academia Española de Dermatología y Venereología expresa su agradecimiento al patrocinador UCB, por su especial apoyo y contribución con la actividad formativa Highlights 2024.

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