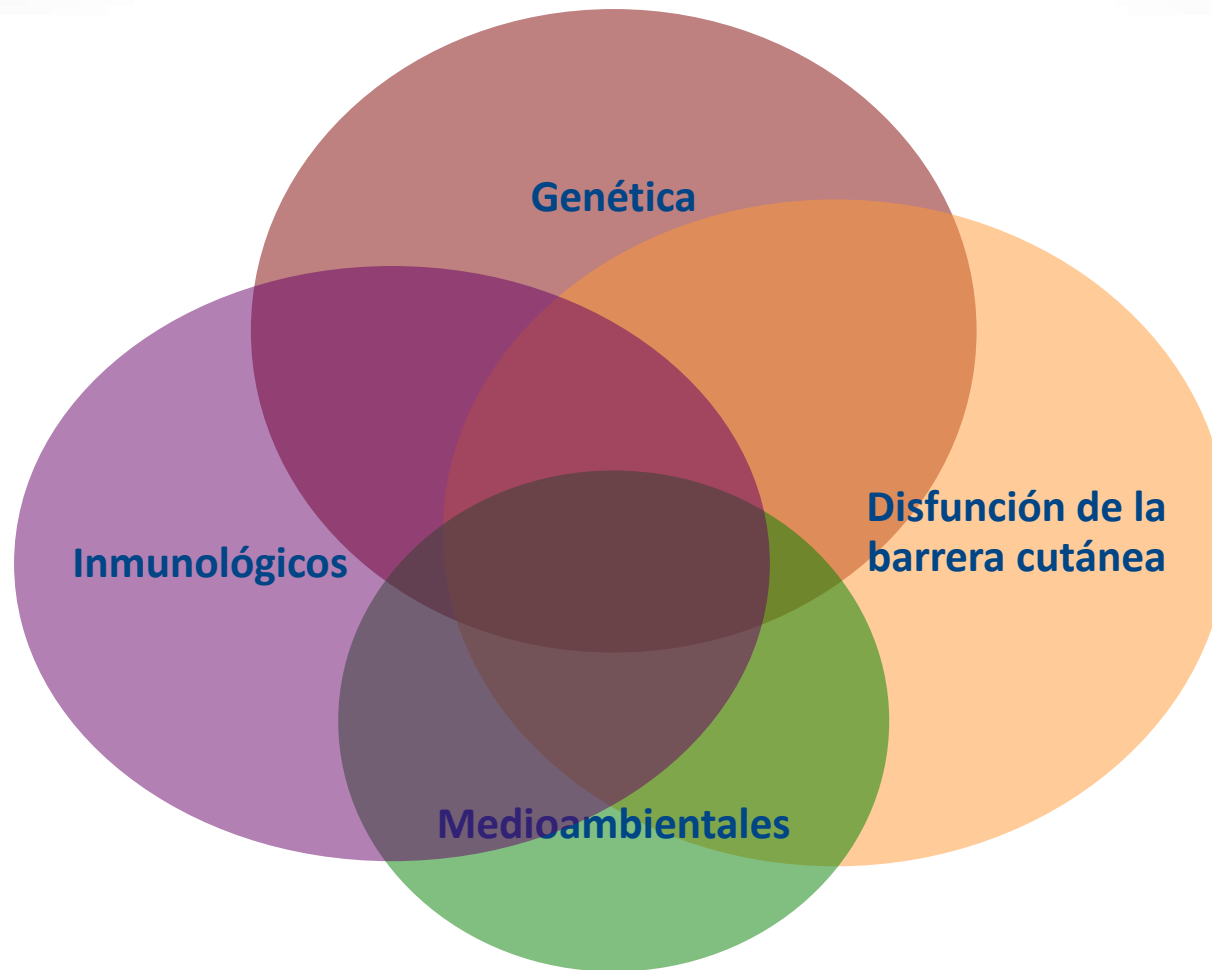


Dermatitis, acné e infecciones

**Raúl de Lucas Laguna Laguna. Jefe de Sección de Dermatología
Pediátrica en el Hospital La Paz de Madrid.**

Factores que contribuyen en la patogenia de la DA



Pregunta 1

¿Qué sabemos de la DA? Señalar la correcta:

1. Es una enfermedad rara en la infancia.
2. Es la primera causa de eritrodermia por debajo de los 3 meses de vida.
3. Ante una dermatitis del pezón unilateral, en un bebé, debemos pensar en primer lugar en DA.
4. El eccema de manos del adolescente suele ser alérgico o irritativo, no atópico.

Epidemiology of Atopic Dermatitis and Atopic March in Children

Jonathan M. Spergel, MD, PhD

KEYWORDS

• Atopic dermatitis • Atopic march • Epidemiology

Epidemiology (derived from the Greek terms *epi* meaning upon, among; *demus* meaning people, district; and *logos* meaning study, word, discourse) is the study of what is upon people.¹ In medicine, it refers to diseases that are affecting people and the study of factors affecting an illness. There are several ways to examine the epidemiology of a disease. Studies can include the prevalence (total number of active cases) or the incidence (risk of new cases) of a disease. By examining these 2 factors, the natural history of a disease can be studied. This review focuses on the prevalence and natural history of atopic dermatitis (AD).

PREVALENCE OF AD

Prevalence has been examined in different ways with each having its own benefits and faults. The most accurate way is an expert physician diagnosis of all patients in a community. However, this is labor intensive and not practical on a larger scale. Another approach is to pick a random population and have an expert physician confirm the diagnosis and estimate population prevalence based on a small subset of patients. This approach has the inherent problem of scaling the conclusion based on a small population. A third approach is to use the *International Classification of Diseases, Ninth Revision* (ICD-9) codes to estimate the prevalence based on medical records. However, ICD-9 codes are neither universally used nor always coded correctly. The fourth approach is to base prevalence on standardized questionnaires given to physicians or families to determine diagnosis. The questionnaires are validated based on physician history and physical examination. This method has been used for most worldwide prevalence data.^{2,3} The International Study of Asthma and Allergies in Childhood (ISAAC) is a worldwide epidemiologic research program established in 1991 using this technique. It has been used in 3 different phases and in more

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Immunol Allergy Clin N Am 30 (2010) 269–280

doi:10.1016/j.jaci.2010.06.003

0889-8561/10/\$ – see front matter © 2010 Elsevier Inc. All rights reserved.

immunology.theclinics.com



- 👉 **90% debut en la infancia**
- 👉 **16% de niños (0-16 años) con DA**
- 👉 **10% siguen con DA después de los 18 años**



Spergel JM. Epidemiology of atopic dermatitis and atopic march in children Immunology Allergy Clin North Am 2010;30:269-280
Zeppa L, Bellini V, Lisi P. Atopic dermatitis in adults. Dermatitis 2011;22:40-46



Septiembre 2015

Domingo	Lunes	Martes	Miércoles	Jueves	Viernes	Sábado
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27	28	29	30			

Seminar

Atopic dermatitis

Stephan Weidinger, Natalija Novak

Atopic dermatitis (also known as atopic eczema) is a chronic inflammatory skin disease that is characterised by intense itching and recurrent eczematous lesions. Although it most often starts in infancy and affects two of ten children, it is also highly prevalent in adults. It is the leading non-fatal health burden attributable to skin diseases, inflicts a substantial psychosocial burden on patients and their relatives, and increases the risk of food allergy, asthma, allergic rhinitis, other immune-mediated inflammatory diseases, and mental health disorders. Originally regarded as a childhood disorder mediated by an imbalance towards a T-helper-2 response and exaggerated IgE responses to allergens, it is now recognised as a lifelong disposition with variable clinical manifestations and expressivity, in which defects of the epidermal barrier are central. Present prevention and treatment focus on restoration of epidermal barrier function, which is best achieved through the use of emollients. Topical corticosteroids are still the first-line therapy for acute flares, but they are also used proactively along with topical calcineurin inhibitors to maintain remission. Non-specific immunosuppressive drugs are used in severe refractory cases, but targeted disease-modifying drugs are being developed. We need to improve understanding of the heterogeneity of the disease and its subtypes, the role of atopy and autoimmunity, the mechanisms behind disease-associated itch, and the comparative effectiveness and safety of therapies



Published Online
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Correspondence to: Prof Stephan Weidinger, Department of Dermatology and

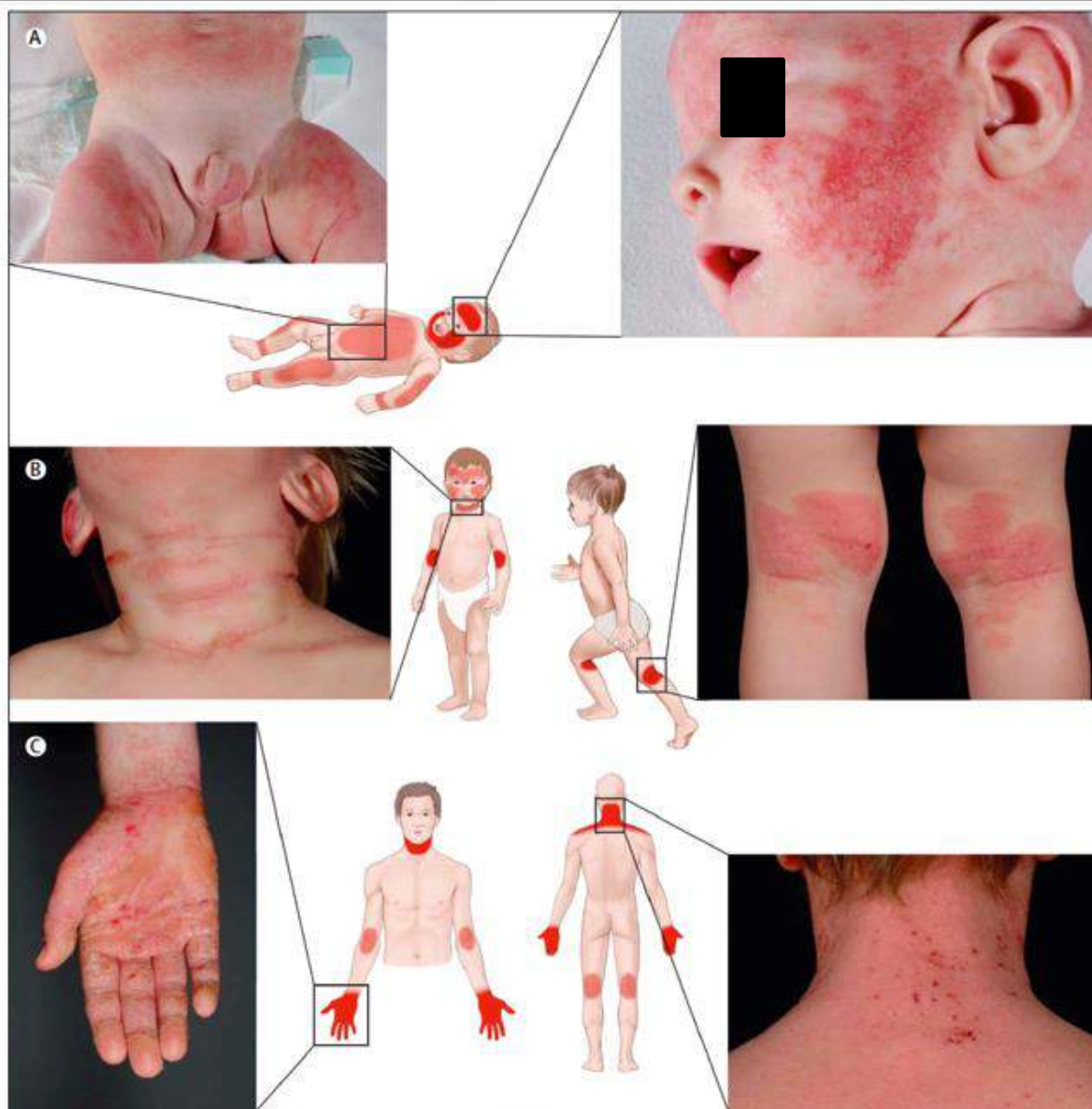


Figure 2: Typical clinical appearance and locations of atopic dermatitis at different ages

(A) In infants, atopic dermatitis is generally acute, with lesions mainly on the face and the extensor surfaces of the limbs. The trunk might be affected, but the napkin area is typically spared. (B) From age 1-2 years onwards, polymorphous manifestations with different types of skin lesions are seen, particularly in flexural folds. (C) Adolescents and adults often present lichenified and excoriated plaques at flexures, wrists, ankles, and eyelids; in the head and neck type, the upper trunk, shoulders, and scalp are involved. Adults might have only chronic hand eczema or present with prurigo-like lesions.

¿Es dermatitis atópica?



SARKAR, Rashmi, et al. Neonatal erythroderma (red baby). *Indian Journal of Paediatric Dermatology*, 2013, vol. 14, no 3, p. 47

Cutaneous disorders

- Eczematous dermatitis
 - Infantile seborrheic dermatitis
 - Atopic dermatitis
- Keratinizing disorders
 - Psoriasis
 - Pityriasis rubra pilaris
 - Ichthyosis and its syndromes
- Generalized mastocytosis
- Toxic epidermal necrolysis
- Ectodermal dysplasia

Infections

- Staphylococcal* scalded skin syndrome
- Toxic shock syndrome
- Candidiasis

Immunodeficiency disorders

- Omenn syndrome
- Graft-versus-host reaction

Metabolic and nutritional disorders

- Disorders of biotin metabolism
- Essential fatty acid deficiency
- Acrodermatitis enteropathica
- Liener's disease

Drugs-ceftriaxone, vancomycin



Menos del 15%



¿Es dermatitis atópica?

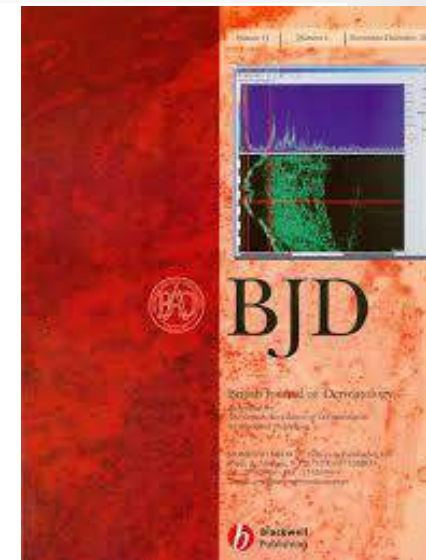


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Article type : Original Article



Hand eczema in adolescents and atopic dermatitis; a prospective cohort study from the BAMSE project

C. Grøhagen¹, C. Lidén¹, C.-F. Wahlgren², N. Ballardini^{1,3}, A. Bergström¹, I. Kull^{1,3,4}, B. Meding¹

¹ Karolinska Institutet, Institute of Environmental Medicine, Stockholm, Sweden

Muchos adolescentes que tuvieron DA en la infancia tienen eccema de manos

Más del 75% de los adolescentes con eccema de manos cumplen criterios de DA

¿Es dermatitis atópica?



Unilateral Nipple Eczema in Children: Report of Five Cases and Literature Review

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Oxford University Hospitals, Oxford, UK

Abstract: Bilateral nipple eczema on the background of atopy is not an uncommon problem and is a minor criterion in some diagnostic systems for atopic dermatitis (AD), but unilateral atopic nipple eczema is under-recognized and often causes clinical concern. We present the first case series of children with unilateral atopic nipple eczema and discuss the clinical aspects of this unusual distribution.



La experiencia personal de los autores y la nuestra propia apoyan la idea de que el eccema del pezón unilateral es una forma frecuente de presentación de DA



Figure 4. Unilateral nipple eruption in patient 4.



Figure 5. Improvement with treatment in patient 4.



Figure 5. Close-up of improvement with treatment in patient 4.



Figure 7. Unilateral nipple eczema in patient 5.



Pediatric Dermatology Vol. 32 No. 6 786–791, 2015

Pityriasis Alba—Common Disease, Enigmatic Entity: Up-to-Date Review of the Literature

Nina Miazek, M.D., Irmina Michalek, M.D., Malgorzata Pawlowska-Kisiel, M.D.,
Malgorzata Olszewska, M.D., Ph.D., and Lidia Rudnicka, M.D., Ph.D.

Department of Dermatology, Medical University of Warsaw, Warsaw, Poland

Abstract: Pityriasis alba (PA) is a skin disorder that affects children and adolescents. Although it is common worldwide, its incidence is markedly higher in darker skin phototypes. Its characteristic features include an extended, multistage course and spontaneous remissions and recurrences. Preceded by erythematous changes, patches of hypopigmented skin of up to a few centimeters in diameter appear on the upper body. Pruritus may accompany it. Even though its etiology is unknown, possible reported triggering factors include sunlight, beauty treatments, and microorganisms, among others. Calcineurin inhibitors play the most crucial role in PA pharmacotherapy. PA often coexists with atopic dermatitis and is considered one of its milder forms.

Pregunta 2

Una de estas comorbilidades de la esfera mental no se asocia a DA:

1. TDAH.
2. Ansiedad y depresión.
3. Trastornos del sueño.
4. TOC.

Published in final edited form as:

J Allergy Clin Immunol. 2013 February ; 131(2): 428–433. doi:10.1016/j.jaci.2012.10.041.

Mental Health Comorbidity in Atopic Dermatitis

Pouya Yaghmaie, M.P.H.¹, Caroline W. Koudelka, M.S.², and Eric L. Simpson, M.D., M.C.R.³

¹School of Medicine, This work was performed in Portland, Oregon, USA.

²Oregon Clinical & Translational Research Unit, This work was performed in Portland, Oregon, USA.

³Department of Dermatology, This work was performed in Portland, Oregon, USA.

Abstract

Background—Recent data, primarily from Europe, suggest children with atopic dermatitis may be at increased risk of developing mental health disorders.

Objective—We aimed to quantify the mental health burden associated with pediatric atopic dermatitis in the United States.

Methods—A cross-sectional study design was used analyzing data from the 2007 National Survey of Children's Health – a survey reporting on the health status of 92,642 non-institutionalized children ages 0-17. The lifetime prevalence of various provider-diagnosed mental health conditions was calculated for those with and without a history of atopic dermatitis.

Results—The odds of having attention-deficit/hyperactivity disorder was significantly increased in children with atopic dermatitis compared to non-atopic dermatitis controls, OR 1.87 (95% CI 1.54, 2.27) even after controlling for known confounders. The adjusted odds ratios for depression, anxiety, conduct disorder, and autism were 1.81 (95% CI 1.33,2.46) , 1.77 (95% CI 1.36, 2.29), 1.87 (1.46, 2.39), and 3.04 (95% CI 2.13, 4.34), respectively, and these estimates were all statistically significant. A clear dose-dependent relationship was observed between the prevalence of a mental health disorder and the reported severity of the skin disease.

Conclusions—Our data reveal a striking association between mental health disorders and atopic dermatitis in the U.S. pediatric population. The severity of the skin disease alters the strength of the association. Prospective cohort studies are needed to verify these associations and to explore underlying mechanisms. Strategies to prevent atopic dermatitis or to aggressively treat early skin inflammation may modify the risk of developing mental health disorders in at-risk children.



Un buen control de la DA previene el desarrollo de alteraciones de la salud mental.

La DA incide de forma muy importante en la mente.

Children with ADHD Symptoms Have a Higher Risk for Reading, Spelling and Math Difficulties in the GINIplus and LISApplus Cohort Studies

Darina Czamara^{1,2}, Carla M. T. Tiesler^{3,4}, Gabriele Kohlböck³, Dietrich Berdel⁵, Barbara Hoffmann⁶, Carl-Peter Bauer⁷, Sibylle Koletzko⁸, Beate Schaaf⁹, Irina Lehmann¹⁰, Olf Herbarth¹¹, Andrea von Berg⁵, Bertram Müller-Myhsok^{1,2}, Gerd Schulte-Körne¹², Joachim Heinrich^{3*}

Abstract

Attention-deficit/hyperactivity disorder (ADHD) and dyslexia belong to the most common neuro-behavioral childhood disorders with prevalences of around 5% in school-aged children. It is estimated that 20–60% of individuals affected with ADHD also present with learning disorders. We investigated the comorbidity between ADHD symptoms and reading/spelling and math difficulties in two on-going population-based birth cohort studies. Children with ADHD symptoms were at significantly higher risk of also showing reading/spelling difficulties or disorder (Odds Ratio (OR) = 2.80, $p = 6.59 \times 10^{-13}$) as compared to children without ADHD symptoms. For math difficulties the association was similar (OR = 2.55, $p = 3.63 \times 10^{-04}$). Our results strengthen the hypothesis that ADHD and learning disorders are comorbid and share, at least partially, the same underlying process. Up to date, it is not clear, on which exact functional processes this comorbidity is based.

👉 Estrés emocional desencadena o exacerba algunas dermatosis.

👉 Mecanismos mal conocidos.

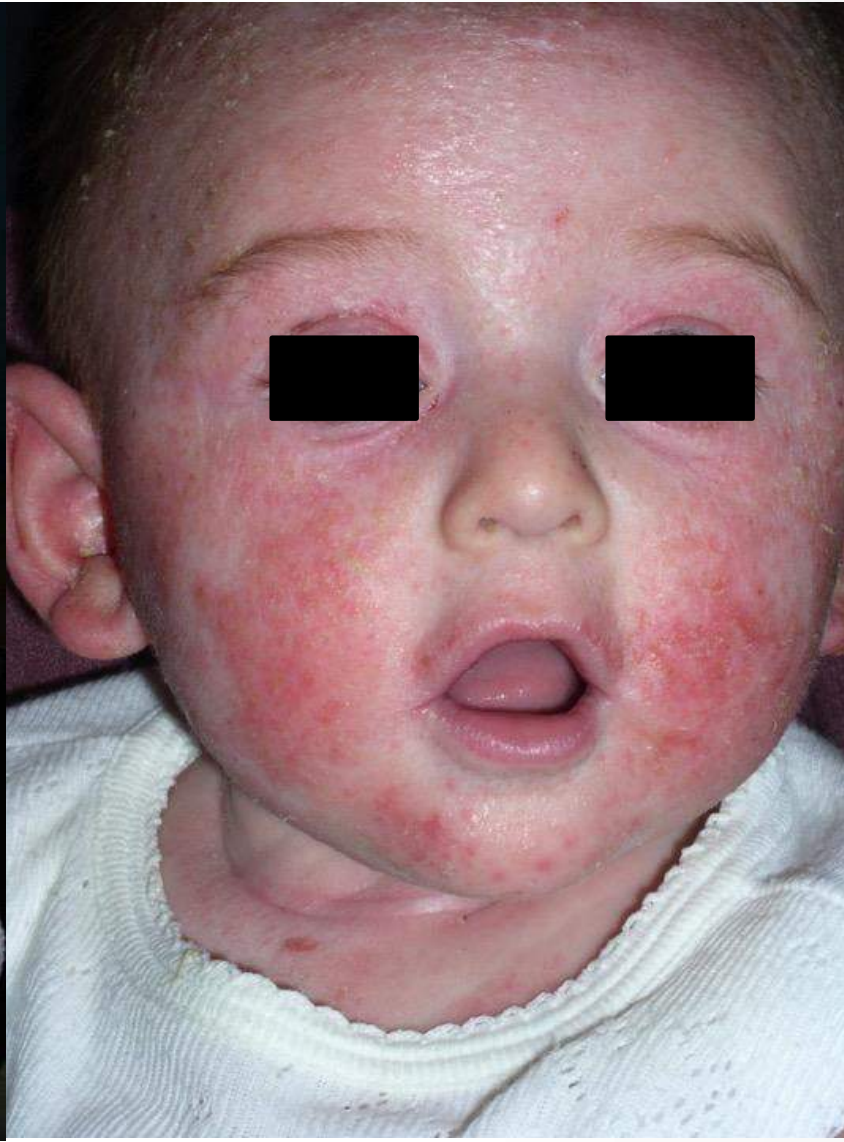
👉 Eje hipotálamo-hipófisis-SR: neuropéptidos, neurotrofinas y linfocinas.

👉 Estímulo de mastocitos y otras células.

👉 Emotional stress can affect, reveal or even exacerbate a number of skin disorders including psoriasis, atopic dermatitis, pruritus, alopecia areata, lichen planus, seborrheic dermatitis, rosacea or urticaria, although the direct pathophysiologic link between stress factors and cutaneous disease manifestation remains unclear. However, there is an increasing evidence that **stress influences disease processes and contributes to the inflammation through modulating hypothalamic-pituitary-adrenal axis and releasing neuropeptides, neurotrophins, lymphokines and other chemical mediators from nerve endings and dermal cells.** **The central role in cellular skin reactivity to various stressors might be attributed to dermal mast cells, as they show close connections with sensory nerve endings and may release a huge number of proinflammatory mediators.** However, many other cells also actively take part in skin response to stress. Although our knowledge is still not complete, one of the most distinct aspect is that the skin, endocrine, nervous and immune systems cannot longer be treated autonomously, but have to be considered as a large multidirectional complex of which interacting nature is still poorly understood.

Reich A, Wójcik-Maciejewicz A, Slominski AT. Stress and the skin. G Ital Dermatol Venereol. 2010 Apr;145(2):213-9.













¿Qué tienen en común todos estos pacientes?

- 👉 Tienen dermatitis.
- 👉 Tienen picor.
- 👉 La piel está lesionada.
- 👉 Piel inflamada.
- 👉 Piel seca...

La barrera cutánea está alterada.



**¿Y estos
otros?**











Todos estos pacientes tienen
DA

Pero hay algo que les ocurre

¿Qué es?

Tienen una
infección

Un círculo vicioso: ciclo picor-rascado



Leung DYM & Soter NA.
J Am Acad Dermatol 2001; 44 (Supl.):S1-12.

👉 ¿Los pacientes atópicos tienen más predisposición a las infecciones de piel?



👉 ¿Influye de alguna manera la infección en los brotes?



👉 ¿Podemos hacer algo para evitar los brotes y las complicaciones?



Abordaje de la DA



Recuperar la integridad de la piel



Mejorar la calidad de vida



Control de la inflamación y del prurito



Escasos efectos adversos



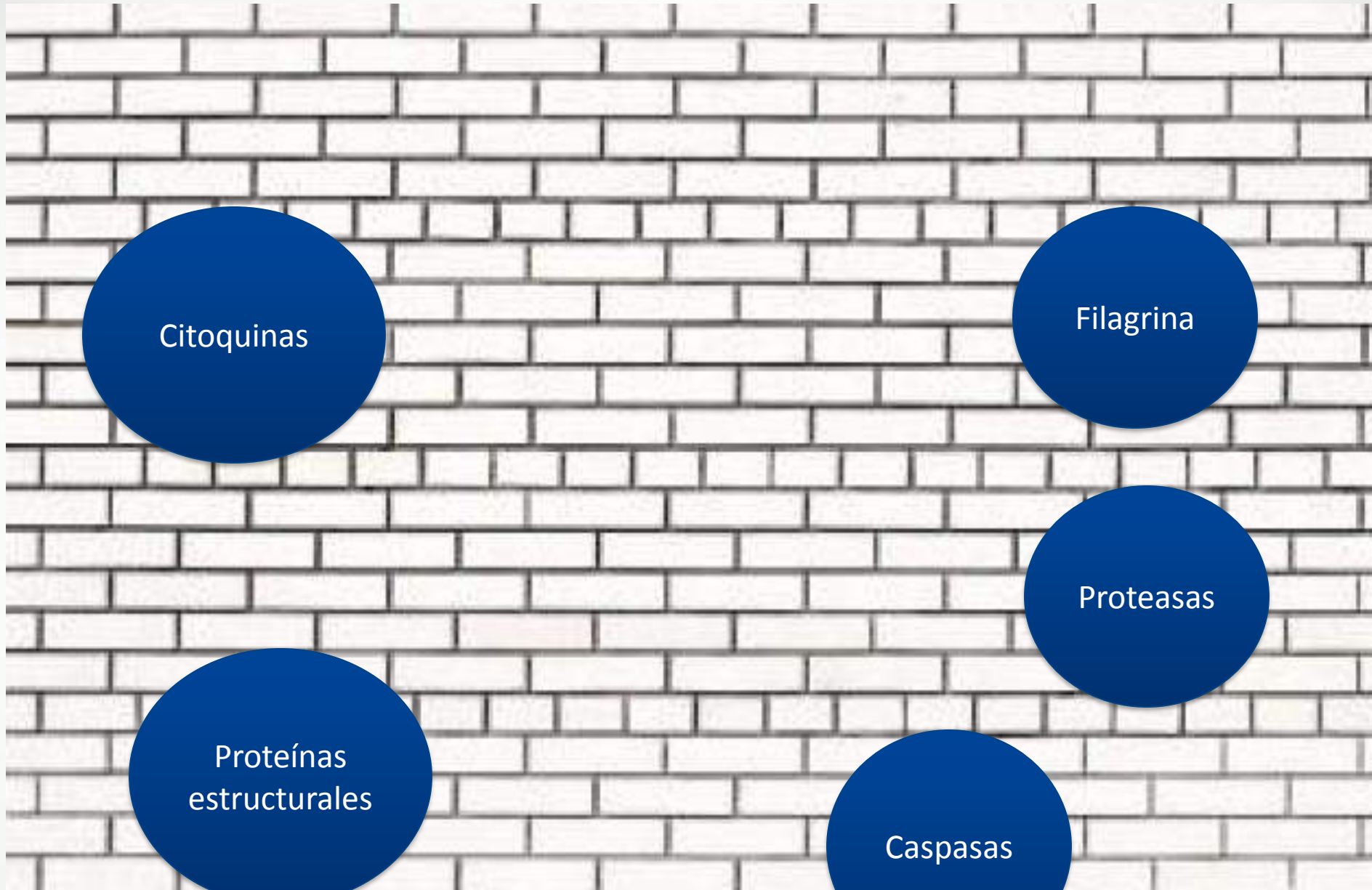
Luchar contra las infecciones

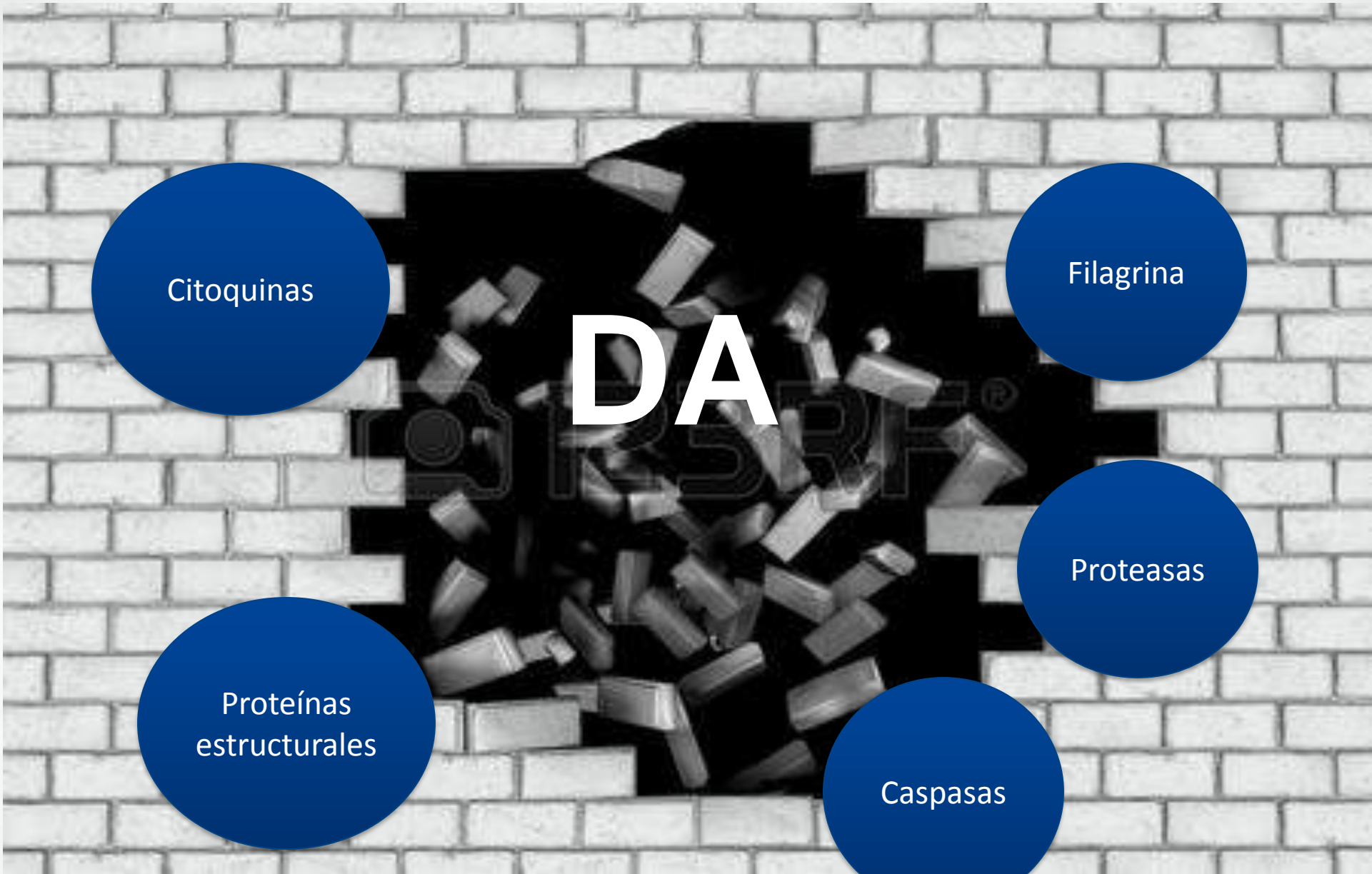


Buena adherencia al tratamiento



Prevenir los brotes





FROM THE ACADEMY

Guidelines of care for the management of atopic dermatitis

Section 2. Management and treatment of atopic dermatitis with topical therapies

Work Group: Lawrence F. Eichenfield, MD (Co-chair),^{a,b} Wynnis L. Tom, MD,^{a,b} Timothy G. Berger, MD,^c Alfons Krol, MD,^d Amy S. Paller, MS, MD,^e Kathryn Schwarzenberger, MD,^f James N. Bergman, MD,^g Sarah L. Chamlin, MD, MSCI,^h David E. Cohen, MD,ⁱ Kevin D. Cooper, MD,^j Kelly M. Cordoro, MD,^c Dawn M. Davis, MD,^k Steven R. Feldman, MD, PhD,^l Jon M. Hanifin, MD,^d David J. Margolis, MD, PhD,^m Robert A. Silverman, MD,ⁿ Eric L. Simpson, MD,^d Hywel C. Williams, DSc,^o Craig A. Elmets, MD,^p Julie Block, BA,^q Christopher G. Harrod, MS,^r Wendy Smith Begolka, MBS,^r and Robert Sidbury, MD (Co-chair)^s
San Diego, San Francisco, and San Rafael, California; Portland, Oregon; Chicago and Schaumburg, Illinois; Memphis, Tennessee; Vancouver, British Columbia, Canada; New York, New York; Cleveland, Ohio; Rochester, Minnesota; Winston-Salem, North Carolina; Philadelphia, Pennsylvania; Fairfax, Virginia; Nottingham, United Kingdom; Birmingham, Alabama; and Seattle, Washington

Atopic dermatitis is a common and chronic, pruritic inflammatory skin condition that can affect all age groups. This evidence-based guideline addresses important clinical questions that arise in its management. In this second of 4 sections, treatment of atopic dermatitis with nonpharmacologic interventions and pharmacologic topical therapies are reviewed. Where possible, suggestions on dosing and monitoring are given based on available evidence. (J Am Acad Dermatol 2014;71:116-32.)

¿Pero realmente conocemos bien los factores desencadenantes de la DA?



Pregunta 3

Uno de estos no es un factor desencadenante de DA:

1. La luz solar.
2. La polución.
3. El polvo.
4. Ciertos alimentos.

Factores ambientales y dermatitis atópica

Estrato córneo

↓ FLG, ↓ LOR, ↓ INV; lípidos alterados.

↑ proteasas, ↓ inhibidores de proteasas; traumatismos por ciclo picor-rascado.

Factores ambientales

- Microbios
- Irritantes
- Alérgenos
- Contaminantes
- HDM
- Jabones y detergentes



- ❖ Alteración de la barrera.
- ❖ **Entrada de alérgenos.**
- ❖ **Entrada de irritantes.**
- ❖ Entrada de microorganismos.

PIEL SECA

INFLAMACIÓN/IRRITACIÓN

PRURITO

SOBREINFECCIÓN

The crucial role of IL-22 and its receptor on thymus and activation regulates chemokine production and T-cell migration by house dust mite extract

Mirim Jang^{1,*}, Hyemin Kim^{1,2,*}, Yejin Kim^{1,*}, Jiyea Choi¹, Jane Jeon¹, Youngil Hwang¹, Jae Seung Kang^{1,2} and Wang Jae Lee¹

¹Department of Anatomy and Cell Biology, Laboratory of Vitamin C and Antioxidant Immunology, Seoul National University College of Medicine, Seoul, Korea; ²Institute of Allergy and Clinical Immunology, Seoul National University Medical Research Center, Seoul, Korea
Correspondence: Jae Seung Kang, Department of Anatomy and Cell Biology, Laboratory of Vitamin C and Antioxidant Immunology, Seoul National University College of Medicine, 103 Daehak-ro, Jongno-gu, Seoul 03080, Korea, Tel.: +82-2-740-8132, Fax: +82-2-741-8202, e-mail: genius29@snu.ac.kr

*These authors contributed equally to this article.

Abstract: House dust mite (HDM) is known as one of the factors that causes atopic dermatitis (AD). Interleukin (IL)-22 and thymus and activation regulated chemokine (TARC) are related to skin inflammatory disease and highly expressed in AD lesions. However, the effects of HDM on IL-22 production in T cells and on TARC production and IL-22R α receptor expression in keratinocytes are unknown. To identify the role of HDM in keratinocytes and T cells, we investigated IL-22R α expression and TARC production in the human keratinocyte cell line HaCaT and IL-22 production in T cells treated with HDM extract as well as their roles in HDM-induced skin inflammation. HDM extract not only increased IL-22R α expression and TARC production in HaCaT but also enhanced IL-22, tumor necrosis factor (TNF)- α and interferon (IFN)- γ production in T cells. The HDM extract-induced IL-22 from T cells significantly increased the production of IL-1 α , IL-6 and TARC in HaCaT

cells. In addition, we found that TARC produced in HDM extract-treated HaCaT induced T-cell recruitment. These results suggest that there is a direct involvement of HDM extract-induced IL-22 in TARC production and T-cell migration. Taken together, TARC production in HaCaT through the interaction between IL-22 and IL-22R α facilitates T-cell migration. These data show one of the reasons for inflammation in the skin lesions of AD patients.

Abbreviations: AD, atopic dermatitis; HDM, house dust mite; IL-22, interleukin-22; IL-22R, interleukin-22 receptor; TARC, thymus and activation regulated chemokine.

Key words: atopic dermatitis – house dust mite – interleukin-22 – interleukin-22 receptor – thymus and activation regulated chemokine

Accepted for publication 16 February 2016



Activadores «gatillo» ('triggers') en piel atópica

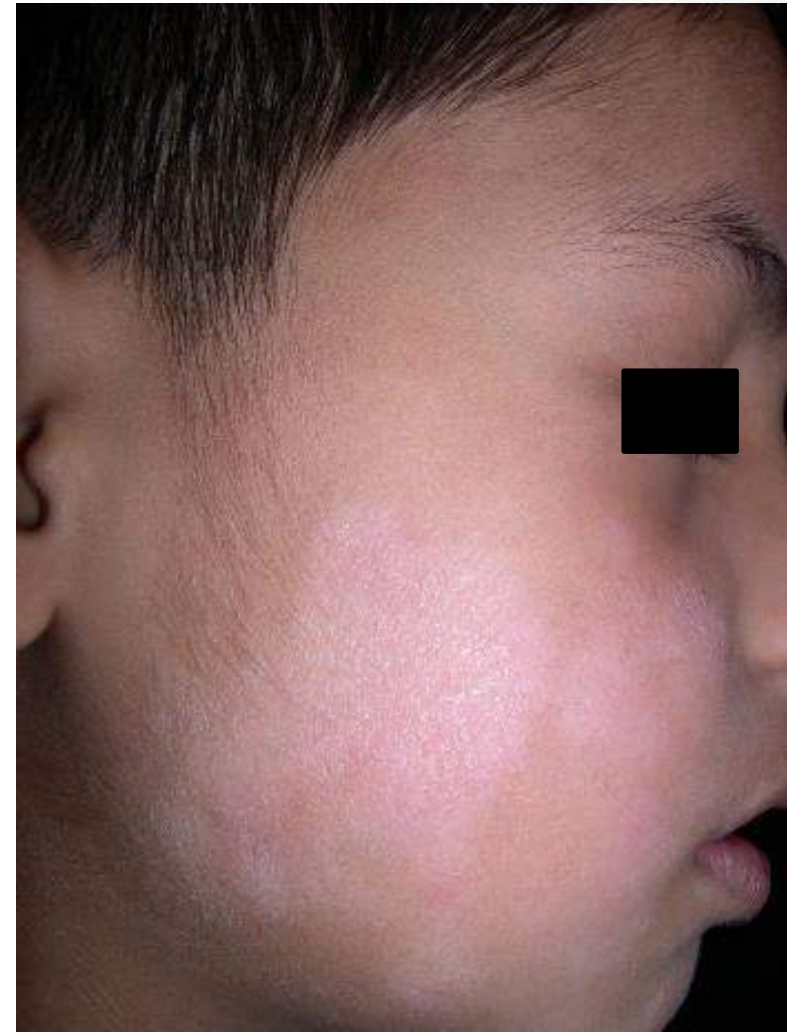
- 👉 Clima: frío/baja humedad/sol.
- 👉 Contaminación ambiental.
- 👉 Irritantes primarios.
- 👉 Aeroalérgenos.
- 👉 Microorganismos (S. Aureus).



DA y radiación UV

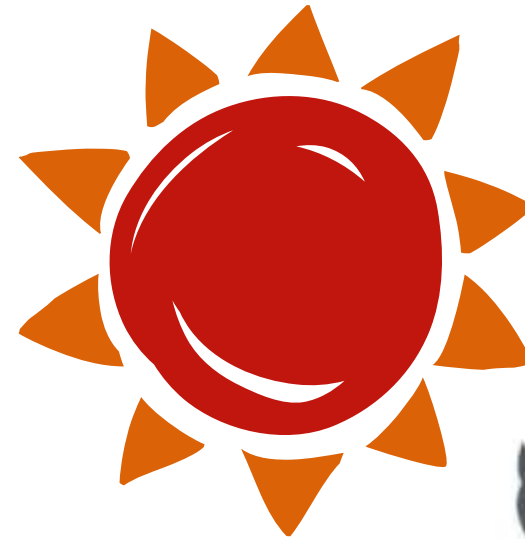
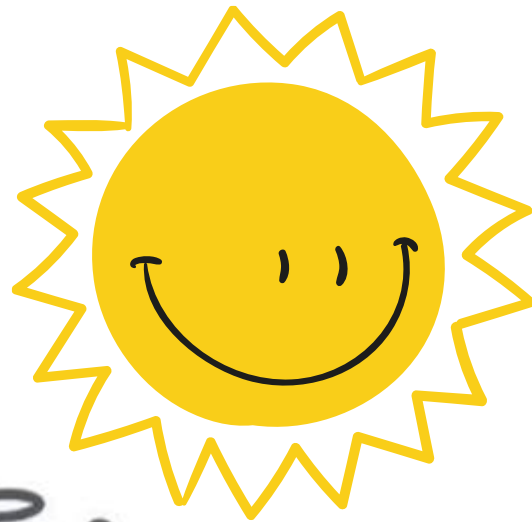


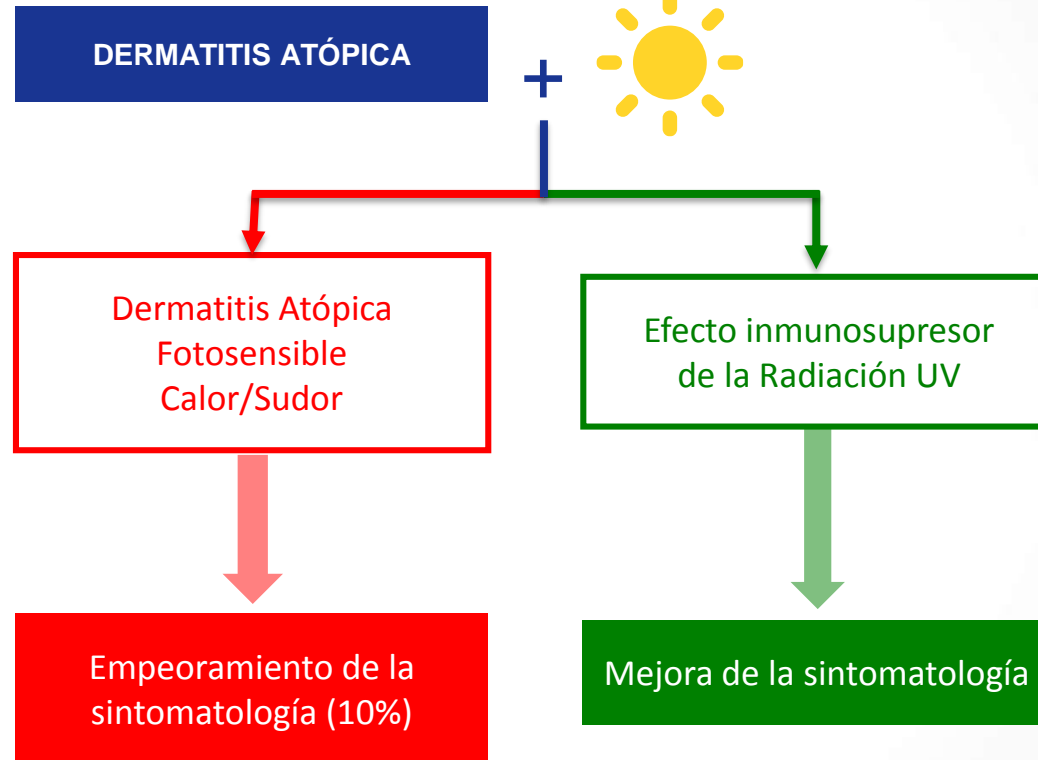
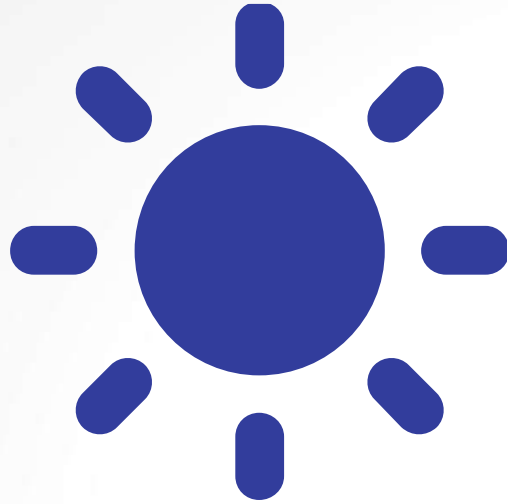
Atopia y radiación UV: pitiriasis alba



Pero...estamos hartos de decir que el sol es beneficioso para la DA







La barrera cutánea del atópico se mantiene alterada en cualquiera de los dos casos



Entorno y DA – Radiación solar

UV Radiation Effects on the Skin Barrier

UV radiation can affect the skin barrier in several ways, particularly in individuals with sensitive or atopic skin whose barrier already is likely to be compromised. Most studies suggest that the low-humidity conditions of winter are most apt to exacerbate atopic and/or sensitive skin.⁴⁹⁻⁵¹ It has been shown that low-humidity conditions increase the number of mast cells and dermal histamine content, which is an important chemical mediator for itching. A minority of patients with AD have disease flares in the summer if heat or exposure to sun, saltwater, or pool water initiates the itch-scratch-itch cycle. However, a recent study in the hairless mouse model demonstrated significant increases in TEWL following a single dose of UVB irradiation (0.15 J/cm²) ($P < .05$).⁵² TEWL began at day 2 post-irradiation and peaked at day 4. Electron microscopy revealed marked morphologic abnormalities, including abnormal profiles of lamellar granules and their contents at the interface between the SC and the stratum granulosum and the persistence of nuclei in the SC.⁵² This finding suggests that UV radiation may affect SC health through alterations in SC lipids and consequent barrier disruption. There is evidence that UV radiation has direct effects on the skin barrier, which is already compromised in patients with AD, in addition to the well-known cancer risks of sun exposure, namely invasive MM and melanoma in situ.

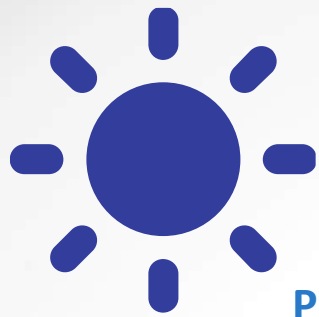
Natural Advances in Eczema Care

Lawrence F. Eichenfield, MD; Joseph F. Fowler, Jr, MD; Darrell S. Rigel, MD; Susan C. Taylor, MD

«La radiación solar puede afectar particularmente en individuos con piel sensible y atópica cuya barrera epidérmica ya está previamente comprometida.»

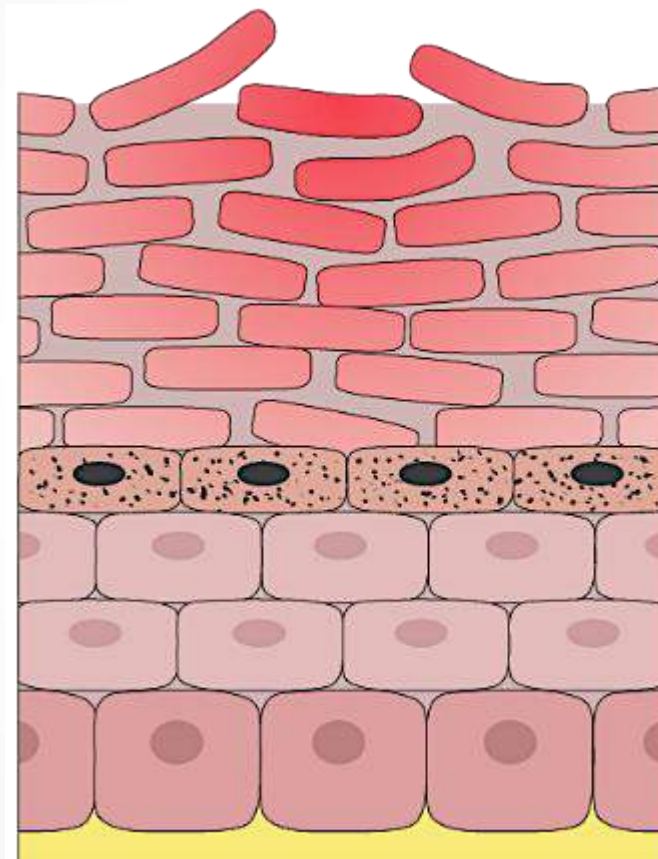
«La radiación UV produce una afectación directa sobre la barrera cutánea en pacientes con DA, además de los ya ampliamente conocidos riesgos de padecer cáncer de piel.»

Eichenfield LF, et al. *Cutis*. 2007 Dec;80(6 Suppl):2-16.



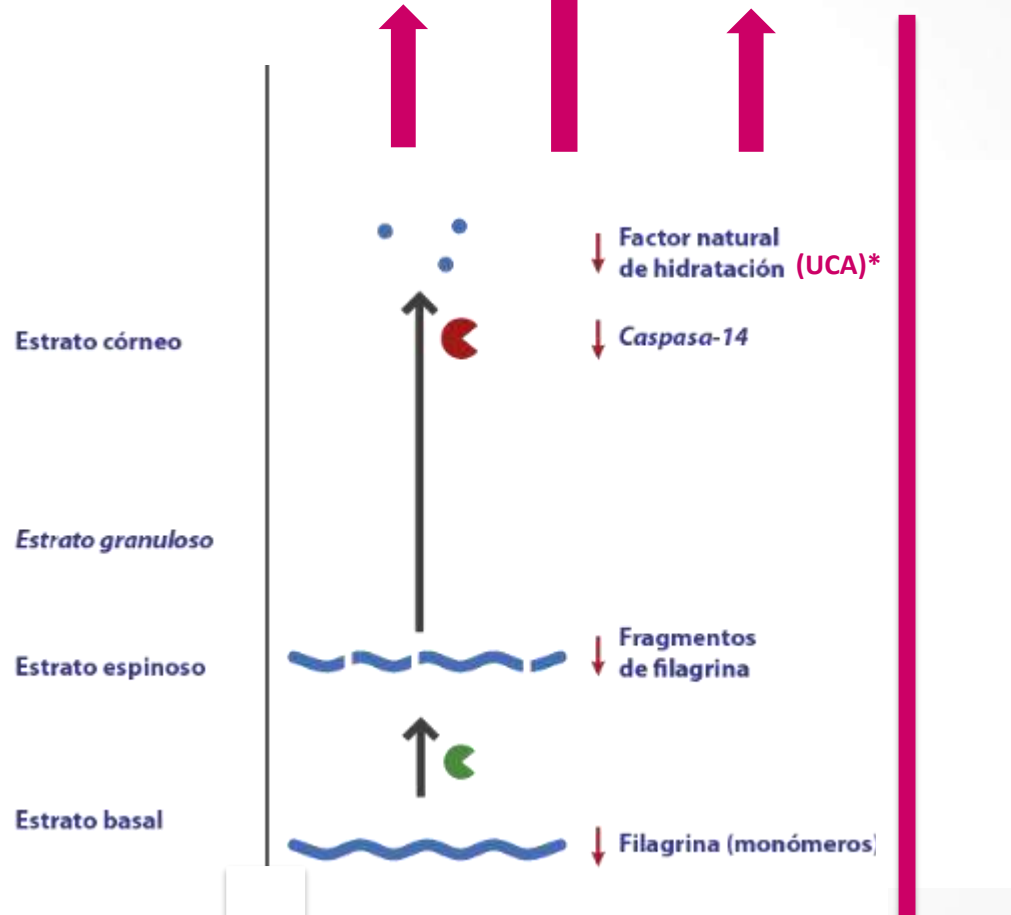
Filagrina y Caspasa - 14

PIEL ATÓPICA



*UCA: ácido urocánico

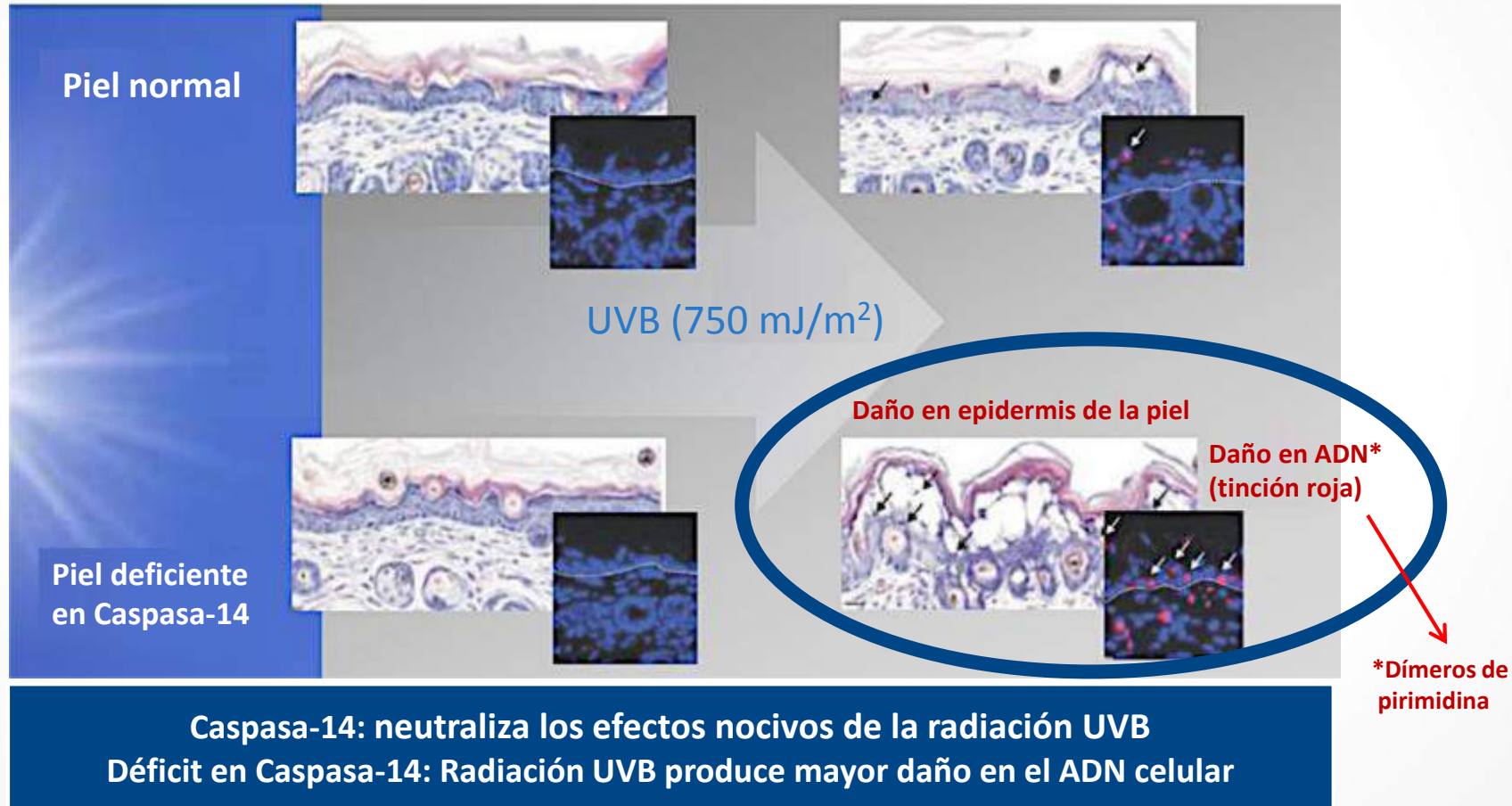
- 1. ALTERACIÓN FUNCIÓN BARRERA
- 2. SEQUEDAD
- 3. DESPROTECCIÓN FRENTE A LA RADIACIÓN SOLAR





Caspase-14 protects against epidermal UVB photodamage and water loss

Geertrui Denecker^{1,2}, Esther Hoste^{1,2}, Barbara Gilbert^{1,2}, Tino Hochepeid^{1,2}, Petra Oyaere^{1,2}, Suskia Lippens^{1,2}, Caroline Van den Broecke², Petra Van Damme^{4,5}, Katharina D'Herde⁶, Jean-Pierre Hachem⁷, Gaetan Borgonie⁸, Richard B. Presland⁹, Luc Schoonjans¹⁰, Claude Libert^{1,2}, Joël Vandekerckhove^{4,5}, Kris Gevaert^{4,5}, Peter Vandennebeele^{1,3,11} and Wim Declercq^{1,3,11}



Entorno y DA – Radiación solar Filagrina

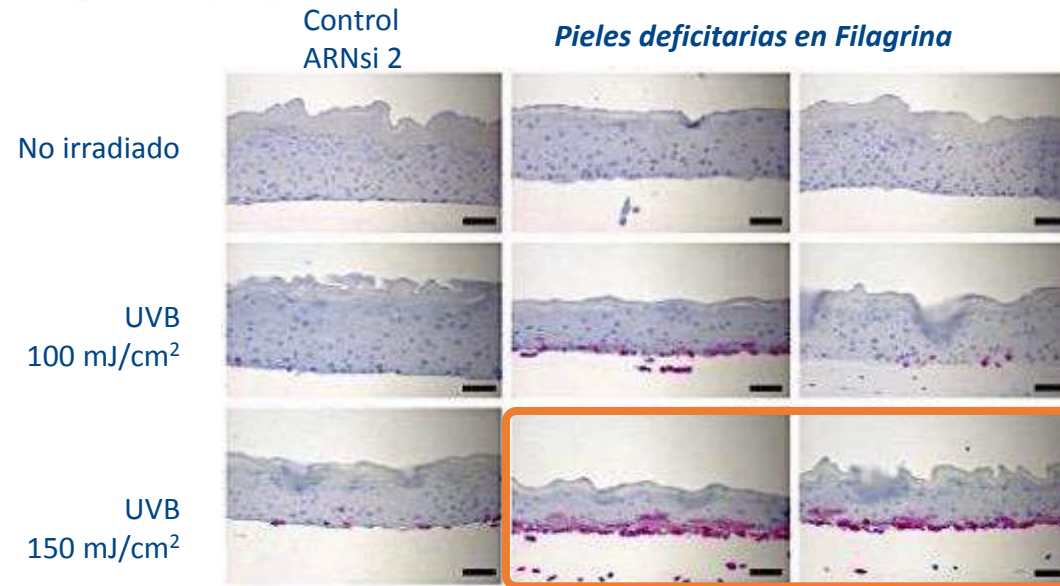


Knockdown of Filaggrin Impairs Diffusion Barrier Function and Increases UV Sensitivity in a Human Skin Model

Michael Mildner^{1,5}, Jiang Jin^{1,2,5}, Leopold Eckhart¹, Sanja Kezic³, Florian Gruber¹, Caterina Barresi¹, Caroline Stremnitzer¹, Maria Buchberger¹, Veronika Mlitz¹, Claudia Ballaun¹, Barbara Sterniczky¹, Dagmar Födinger¹ and Erwin Tschachler^{1,4}

Disminución de la producción de ácido urocánico (UCA) y aumento de la sensibilidad UV en cultivos organotípicos de piel deficiente en Filagrina.

La inmunohistoquímica para Caspasa-3 revela una activación potenciada de Caspasa-3, un marcador de apoptosis, tras la exposición a radiación UVB.



Apoptosis

Déficit de Filagrina → Mayor sensibilidad al daño por radiación UVB

Dermatitis atópica → ↓↓↓ Filagrina

Mildner M, et al. J Invest Dermatol. 2010 Sep;130(9):2286-94.

Déficit de Filagrina y Caspasa-14 en DA



Comment on 'Does a History of Eczema Predict a Future Basal Cell Carcinoma?'

PM Elias and ML Williams
FLG Mutations Could Explain Increased BCC in Eczema

"We also note that loss of filaggrin results in downstream depletion of a molecule called urocanic acid. This molecule is the most important filter of ultraviolet light in the outermost layer of skin, the stratum corneum. Hence, deficiency of urocanic acid would allow more damaging radiation light to enter the skin, and could account for the association between basal cell cancers and a history of atopic dermatitis".

Elias PM. J Invest Dermatol. 2013 Jun;133(6):1676-7.

Skin Cancer and Atopic Dermatitis. 16, 2013 By Peter M. Elias, M.D. & M. Williams, M.D.

Publication: [Letter to the Editor](#) in response to the commentary, [Does a History of Eczema Predict a Future Basal Cell Carcinoma?](#)

Elias PM, Williams ML. J Invest Dermatol. 2013 Jan 22. PMID: 23340733.



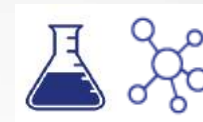
¿Lesiones a largo plazo?

En DA también debemos recomendar fotoprotección





Agentes proirritantes: cloro



La exposición al cloro de las piscinas en pacientes con DA tiene un papel importante en el desarrollo y/o exacerbación de la DA.

El cloro libre disminuye la retención de agua en la capa córnea.

The Journal of Dermatology
Vol. 30: 196-202, 2003

Free Residual Chlorine in Bathing Water Reduces the Water-Holding Capacity of the Stratum Corneum in Atopic Skin

Taisuke Seki, Susumu Morimatsu, Hidefumi Nagahori and Masaaki Morohashi

Abstract

Some patients with atopic dermatitis (AD) develop dry skin or exacerbated cutaneous inflammations with frequent swimming in public pools or after bathing. We examined the effects of residual chlorine in bathing water on the function of the stratum corneum (SC) in patients with AD and determined the lowest chlorine concentration showing an effect. In addition, we investigated the relationship between the free residual chlorine concentration in bathing water and the water-holding capacity of the SC in patients with AD. Twenty patients with AD and 10 normal control (NC) subjects were included in this study. The hydration status of the SC on the flexor surface of the forearm was measured with a corneometer before and after the subject's arms were immersed in tubs filled with comfortably hot water (40°C) containing residual chlorine at concentrations of 0, 0.5, 1.0 and 2.0 mg/L for 10 minutes in a room maintained at normal temperature (24°C) and relative humidity (55%). The water-holding capacity of the SC after immersion was calculated by integration of the hydration status determined every 30 seconds over a period of 10 minutes. In the patients with AD, the average SC hydration status after immersion in comfortably hot water containing residual chlorine at 1.0 and 2.0 mg/L was significantly lower than that following immersion in water containing a negligible concentration of residual chlorine (*i.e.*, less than 0.03 mg/L) ($p < 0.05$). In the NC subjects, significant differences were observed only between the 2.0 mg/L and the negligible residual chlorine groups ($p < 0.05$). The water-holding capacity of the SC was significantly decreased with a residual chlorine concentration of 0.5 mg/L or higher in the patients with AD ($p < 0.01$). However, in the NC subjects, a significant decrease in water-holding capacity was observed only at a residual chlorine concentration of 2 mg/L ($p < 0.01$). These results indicate, first, that the water-holding capacity of the SC in patients with AD is more sensitive to free residual chlorine exposure than that in NC subjects without AD. Second, these results suggest that free residual chlorine exposure in patients with AD may play a role in the development or exacerbation of AD.



Pediatric Allergy and Immunology

ORIGINAL ARTICLE

Association of pollution and climate with atopic eczema in US children

P. Kathuria¹ & J. I. Silverberg^{2,3}

¹Department of Dermatology, Northwestern University Feinberg School of Medicine, Chicago, IL, USA; ²Departments of Dermatology, Preventive Medicine and Medical Social Sciences, Northwestern University Feinberg School of Medicine, Chicago, IL, USA; ³Northwestern Medicine Multidisciplinary Eczema Center, Chicago, IL, USA

To cite this article: Kathuria P, Silverberg JI. Association of pollution and climate with atopic eczema in US children. *Pediatr Allergy Immunol* 2016: 00.

Agentes proirritantes: contaminación ambiental



☞ Cantidades excesivas de sustancias que causan efectos negativos para:

- ❖ Medio ambiente.
- ❖ Seres vivos.

☞ Principales fuentes.

- ❖ Naturales (p. ej., volcanes).
- ❖ Artificiales (causadas por la actividad humana).



CONTAMINANTES DEL AIRE

- ❖ Humo del tabaco
- ❖ Compuestos orgánicos volátiles
- ❖ Tolueno
- ❖ Gases de escape de los vehículos a motor
- ❖ NO₂...



- ❖ Oxidación.
- ❖ Alteración del metabolismo celular.
- ❖ Inflamación.
- ❖ Alteración de la barrera cutánea.

Clinical reviews in allergy and immunology

Series editors: Donald Y. M. Leung, MD, PhD, and Dennis K. Ledford, MD

The role of air pollutants in atopic dermatitis

Kangmo Ahn, MD, PhD *Seoul, Korea*

Ahn K. J Allergy Clin Immunol. 2014 Nov;134(5):993-9; discussion 1000.

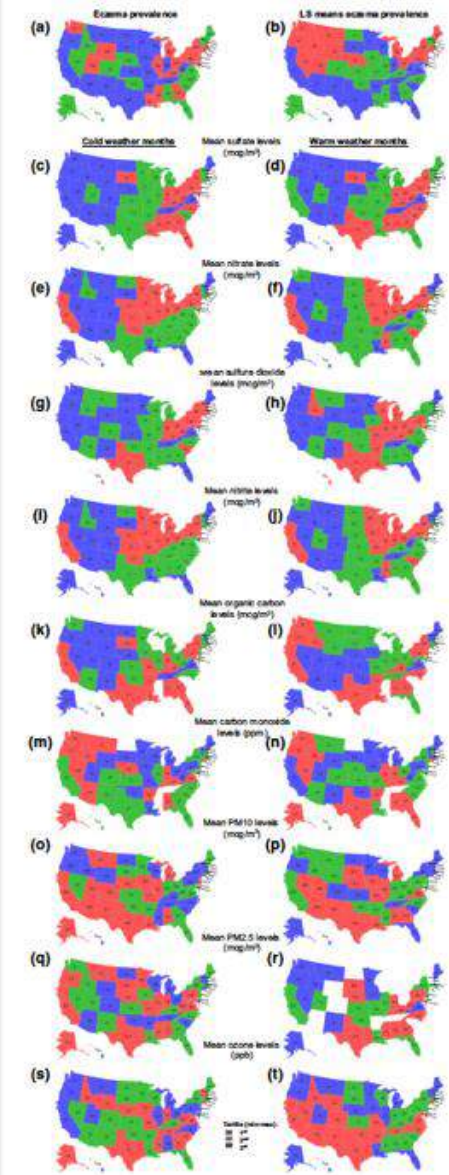
ORIGINAL ARTICLE

Association of pollution and climate with atopic eczema in US children

P. Kathuria¹ & J. I. Silverberg^{2,3}

¹Department of Dermatology, Northwestern University Feinberg School of Medicine, Chicago, IL, USA; ²Departments of Dermatology, Preventive Medicine and Medical Social Sciences, Northwestern University Feinberg School of Medicine, Chicago, IL, USA; ³Northwestern Medicine Multidisciplinary Eczema Center, Chicago, IL, USA

To cite this article: Kathuria P, Silverberg JI. Association of pollution and climate with atopic eczema in US children. *Pediatr Allergy Immunol* 2016; 00.



Agentes proirritantes: *S. aureus*



DERMATITIS ATÓPICA

- ❖ Alteración lípidos epidérmicos.
 - ❖ Alteración péptidos antimicrobianos.
 - ❖ ↑ pH.
- ↓
- ❖ Desequilibrio del microbioma de la piel.

+

ENTORNO

- ❖ Arena.
 - ❖ Aguas recreacionales.
 - ❖ Radiación UV.
(elimina la flora saprófita de la piel).
- ↓
- ❖ Desequilibrio del microbioma de la piel.

↑ *S. aureus*

- ❖ Picor
- ❖ Irritación/inflamación
- ❖ Riesgo de sobreinfección

REVIEW ARTICLE

Microbiome and pediatric atopic dermatitis

Claire E. POWERS,¹ Diana B. MCSHANE,² Peter H. GILLIGAN,³ Craig N. BURKHART,²
Dean S. MORRELL²

¹Duke University School of Medicine, Durham, ²Department of Dermatology, University of North Carolina Chapel Hill, ³Clinical Microbiology-Immunology Laboratories, University of North Carolina Hospitals, Chapel Hill, North Carolina, USA

ABSTRACT

Atopic dermatitis is a chronic inflammatory skin condition with drastic impacts on pediatric health. The pathogenesis of this common disease is not well understood, and the complex role of the skin microbiome in the pathogenesis and progression of atopic dermatitis is being elucidated. Skin commensal organisms promote normal immune system functions and prevent the colonization of pathogens. Alterations in the skin microbiome may lead to increased *Staphylococcus aureus* colonization and atopic dermatitis progression. Despite the evidence for their important role, probiotics have not been deemed efficacious for the treatment of atopic dermatitis, although studies suggest that probiotics may be effective at preventing the development of atopic dermatitis when given to young infants. This review will cover the most recent published work on the microbiome and pediatric atopic dermatitis.

Key words: antimicrobial cationic peptides, atopic dermatitis, microbiota, probiotics, *Staphylococcus aureus*.

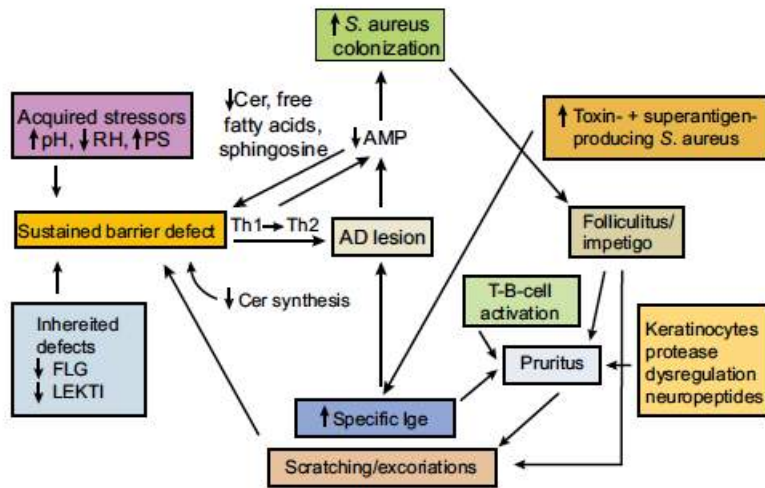
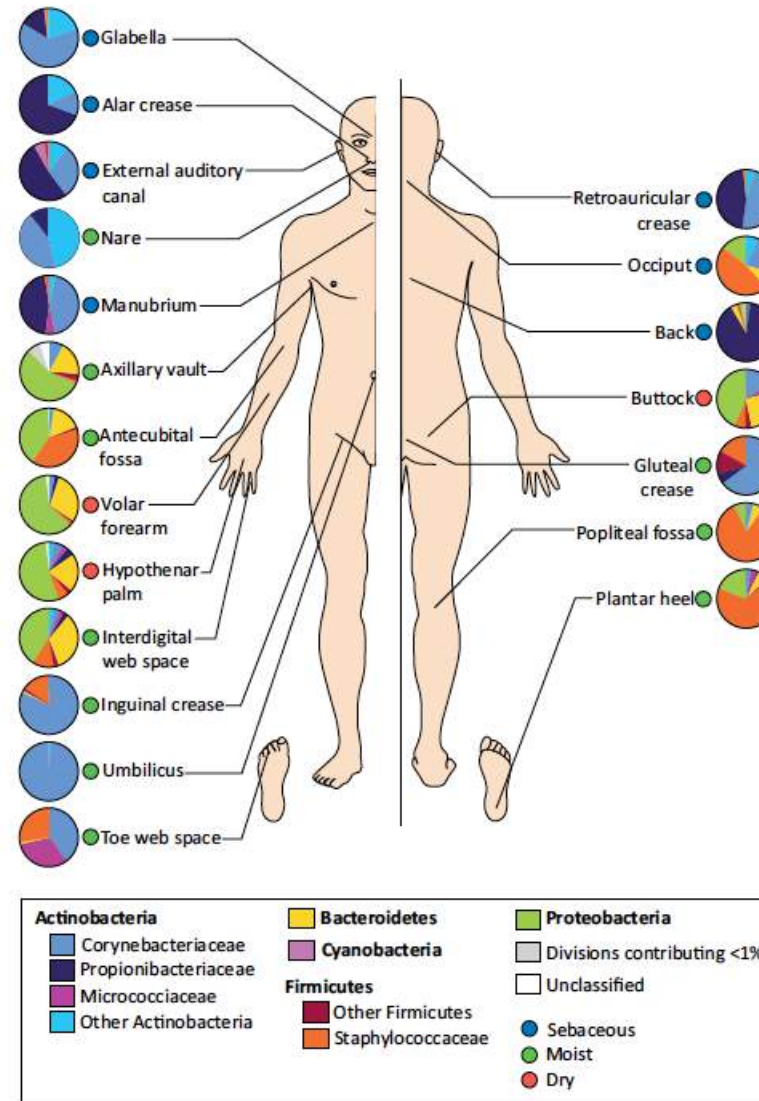


Figure 1. Secondary infections can further aggravate barrier abnormality in atopic dermatitis. AD, atopic dermatitis; AMP, adenosine monophosphate; Cer, ceramide; FLG, filaggrin; LEKTI, lymphoepithelial Kazal-type related trypsin inhibitor; PS, psychological stress; RH, relative humidity; Th1, T-helper 1; Th2, T-helper 2. Reprinted with permission from Macmillan Publishers.⁴⁹

T-helper (Th)-cell function through interleukin (IL)-1 signaling pathways¹⁴ while potentially inhibiting the development of type 2 Th-cell functions responsible for allergic conditions including atopic dermatitis, asthma and allergic rhinitis.¹⁵

ROLE OF THE MICROBIOME IN ATOPIC DERMATITIS



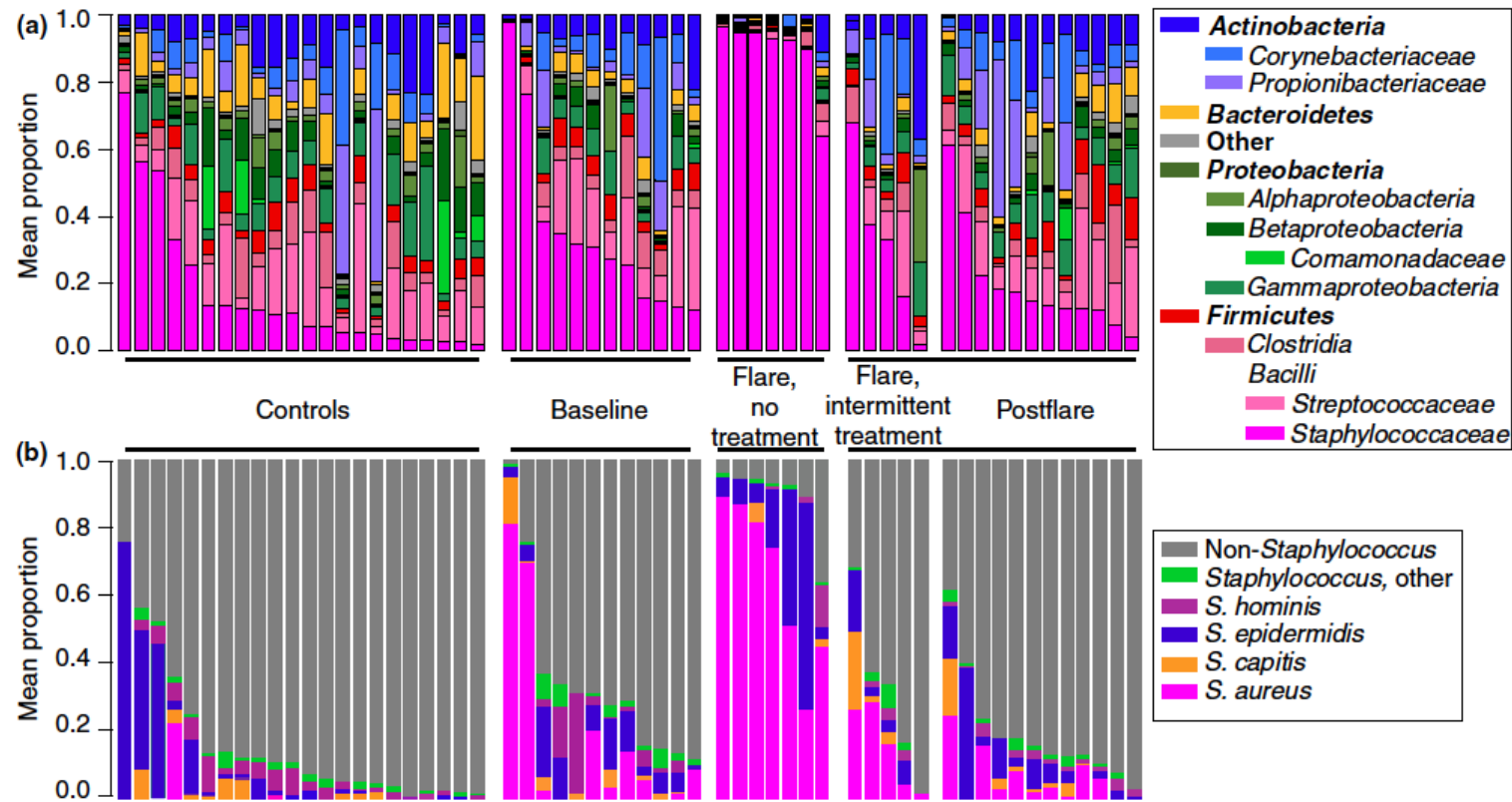
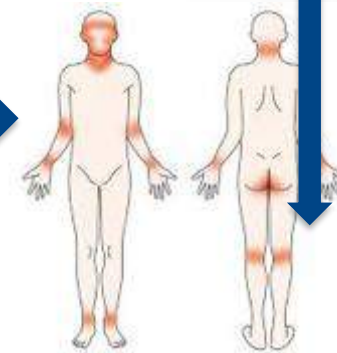


Figure 3. Bacterial taxonomic classifications in the atopic dermatitis skin microbiome. (a) Mean relative abundance of the 14 major phyla order in the antecubital and popliteal creases for controls and atopic dermatitis disease states: baseline, flare (no treatment and intermittent) and post-flare. (b) Mean relative abundances for antecubital and popliteal creases of species-level classifications of staphylococcal species. Order of subjects follows A. Reprinted with permission from Cold Spring Harbor Laboratory Press.²⁹

Huecos poplíteos y pliegues antecubitales



¿Existen otros factores
patogénicos en DA?

Update on the Role of Systemic Vitamin D in Atopic Dermatitis

Krishna Mutgi, M.D.,* and John Koo, M.D.†

*College of Medicine University of Toledo, Toledo, Ohio, †University of California, San Francisco, San Francisco, California

Abstract: Atopic dermatitis (AD) is a common chronic inflammatory type

La vitamina D es necesaria para mantener la barrera cutánea
aumenta la expresión de filagrina, involucrina y AMPs
Posiblemente suplementos de vit D sean beneficiosos en DA severa
Problema con los estudios: poca muestra, diferentes dosis, mala
monitorización de niveles.

...tarily significant role for vitamin D in the treatment of AD.

Hay modas que vuelven...

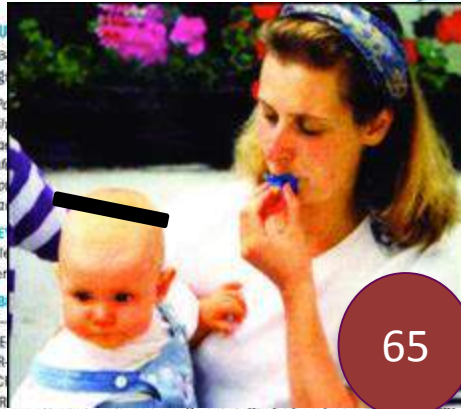


*Papel de la microbiota del tubo digestivo
Teoría higienista...*

Pacifier Cleaning Practices and Risk of Allergy Development



184
bebés



65



119

WHAT'S KNOWN ON THIS SUBJECT: Infants with a di...

Mr Hesselmar was involved in the planning and design of the study and interpretation of the data, and was responsible for the design of the protocols used, construction and validation of the databases and diagnoses, writing of the manuscript, and statistical analyses, with the exception of the analyses of saliva samples. Mr Hesselmar, Mr Saalman, and Mr Åberg followed up the children at all follow-ups. Ms Sjöberg was responsible for the data analysis, analyses of the saliva samples, and the preparation and writing concerning the terminal report.

METHODS: A birth-cohort of 184 infants was examined for colonization and sensitization to airborne and food allergens at 18 and 36 months of age and, in addition, promptly on occurrence of symptoms of asthma and eczema. Pacifier cleaning practices were recorded during infancy. The oral microbiota of the children was characterized by analysis of saliva samples collected at 18 months of age.

Children whose parents "cleaned" their pacifier by sucking on it were less likely to have asthma (odds ratio [OR] 0.12; 95% confidence interval [CI] 0.01–0.99), eczema (OR 0.37; 95% CI 0.15–0.91), or allergic sensitization (OR 0.37; 95% CI 0.10–1.27) at 18 months of age than children whose parents did not use this cleaning technique ($n = 58$). At 36 months, eczema remained at age 36 months (hazard ratio 0.37; 95% CI 0.10–1.27). Parental vaginal delivery and parental pacifier sucking yielded additive protective effects against eczema development. The oral microbiota differed between children whose parents cleaned their pacifier by sucking on it and children whose parents did not use this cleaning technique.

Parental sucking of their infant's pacifier may reduce the risk of allergy development, possibly via immune stimulation by allergens transferred to the infant via the parent's saliva. *Pediatrics* 2013;132:1837

Menos asma, eccema e IgE más baja
Protección hasta los 36 meses
Parto vaginal también protege

Lavar platos a mano o en lavavajillas y desarrollo de eccema, asma o rinoconjuntivitis, entre otras

Lavar platos a mano se relaciona con menos eccema, asma o rinoconjuntivitis, entre otras

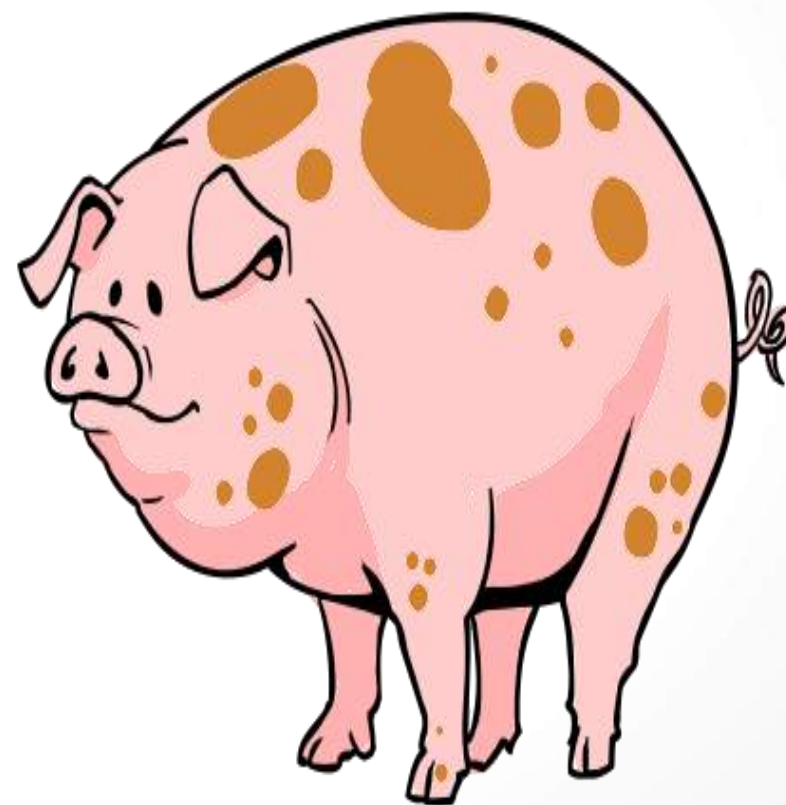


VS



Teoría higienista – lavar platos a mano sería un método de lavado menos eficiente que favorecería contacto con agentes infecciosos induciendo tolerancia inmunológica

Hesselmar B. Pediatrics 2015



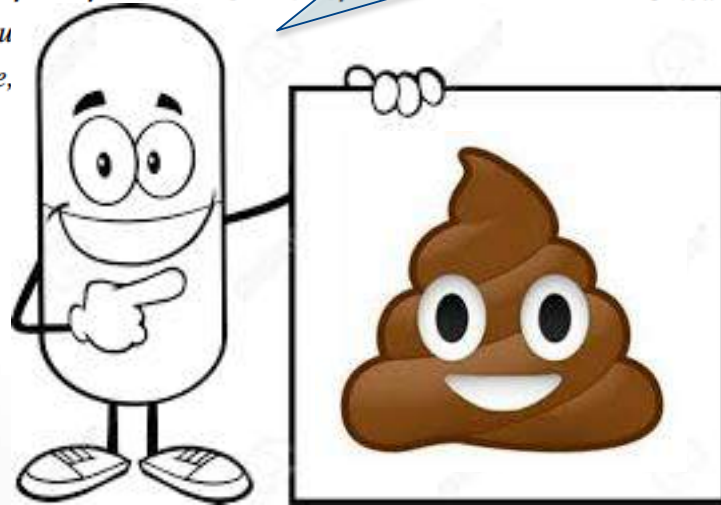
Clinical reviews in allergy and immunology

Series editors: Donald Y. M. Leung, MD, PhD, and Dennis K. Ledford, MD

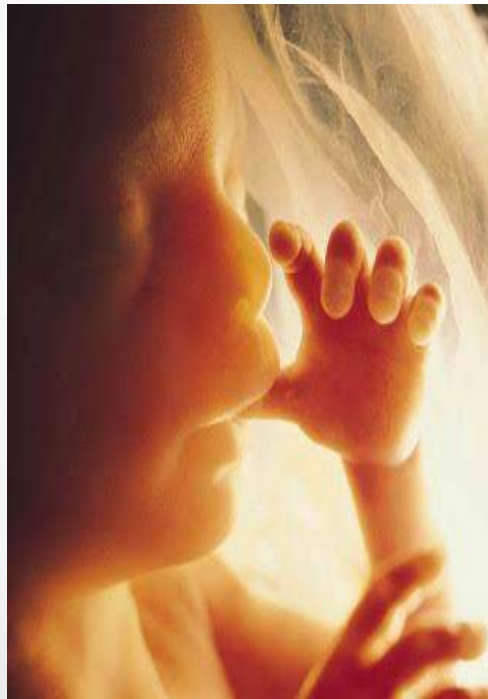
The gut microbiota and inflammatory noncommunicable diseases: Associations and potentials for gut microbiota therapies

Imagine what
I have inside

Christina E. West, MD, PhD,^{a,b} Harald Renz, MD,^{a,c} Maria C. Jenmalm, PhD,^{a,d} Aिता L. Kozyrskyj, PhD,^{a,e}
Katrina J. Allen, MD, PhD,^{a,f} Peter Vuillermin, MD, PhD,^{a,g} and Susan L. Prescott, MD, PhD,^{a,h} on behalf of the in-FLAME
Microbiome Interest Group: Charles MacKay, PhD,^{a,i} Seppo Salminen, PhD,^{a,j} Gary Wong, MD,^{a,k} John Sinn, MD,^{a,l}
Jakob Stokholm, MD, PhD,^{a,m} Hans Bisgaard, MD, DMSci,^{a,m} Ruby Pawankar, MD, PhD,^{a,n} Paul Noakes, PhD,^{a,h}
Dörthe Kesper, PhD,^{a,c} and Meri Tulic, PhD^{a,o} Umeå and Linköping, Sweden, Marburg, Germany, Edmonton, Alberta,
Canada, Melbourne, Australia, Helsinki, Finland, Hong Kong, China, Copenhagen, Denmark, Tokyo,
Japan, and Nice, France



Estrés prenatal



Allergy EUROPEAN JOURNAL OF ALLERGY AND CLINICAL IMMUNOLOGY



Allergy

REVIEW ARTICLE

Prenatal maternal stress and atopic diseases in the child: a systematic review of observational human studies

N. W. Andersson^{1,2,3,†}, M. V. Hansen^{3,†}, A. D. Larsen⁴, K. S. Hougaard⁴, H. A. Kolstad⁵ & V. Schlünssen^{4,5,6}

¹Department of Epidemiology Research, Statens Serum Institut, Copenhagen, Denmark; ²Sydney Medical School, Faculty of Medicine, University of Sydney, Concord Hospital, Sydney, NSW, Australia; ³Department of Organic Psychiatric Disorders and Emergency Ward, Aarhus University Hospital, Risikov, Aarhus, Denmark; ⁴The National Research Centre for the Working Environment, Copenhagen, Denmark; ⁵Department of Occupational Medicine, Danish Ramazzini Centre, Aarhus University Hospital, Aarhus, Denmark; ⁶Section for Environment, Occupation and Health, Department of Public Health, Danish Ramazzini Centre, Aarhus University, Aarhus, Denmark

To cite this article: Andersson NAW, Hansen MV, Larsen AD, Hougaard SK, Kolstad HA, Schlünssen V. Prenatal maternal stress and atopic diseases in the child: a systematic review of observational human studies. *Allergy* 2015; DOI: 10.1111/all.12762.

Keywords

asthma; atopic disorders; child allergy; prenatal maternal stress; systematic review.

Correspondence

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DOI:10.1111/all.12762

Edited by: Bodo Niggemann

Abstract

Background: A growing number of studies suggest that maternal stress during pregnancy promotes atopic disorders in the offspring. This is the first systematic review to address prenatal maternal stress (PNMS) and the subsequent risk of atopy-related outcomes in the child.

Methods: The review was performed in accordance to the PRISMA criteria. We searched and selected studies in PubMed, Scopus, Embase and PsychINFO until November 2014.

Results: Sixteen (with 25 analyses) of 426 identified articles met the review criteria. Fifteen of 16 studies reported on the association between PNMS and atopic outcomes. Of the 11 exposure-response analyses reported, six found statistically significant trends.

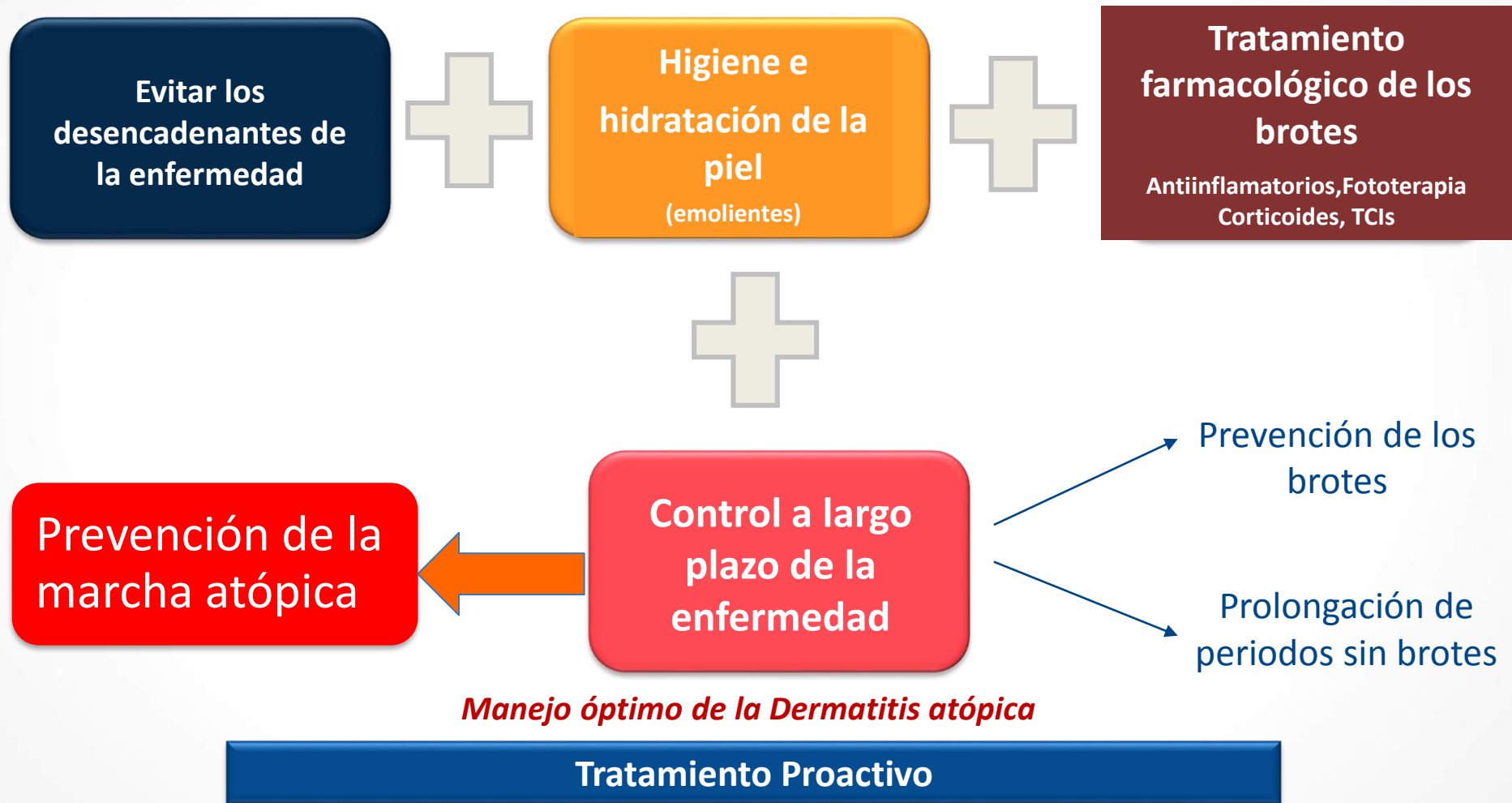
Conclusion: This systematic review suggests a relationship between maternal stress during pregnancy and atopic disorders in the child. However, the existing studies are of diverse quality. The wide definitions of often self-reported stress exposures imply a substantial risk for information bias and false-positive results. Research comparing objective and subjective measures of PNMS exposure as well as objective measures for atopic outcome is needed.

Relación entre estrés materno y DA en el hijo

Adivina quién tendrá dermatitis atópica

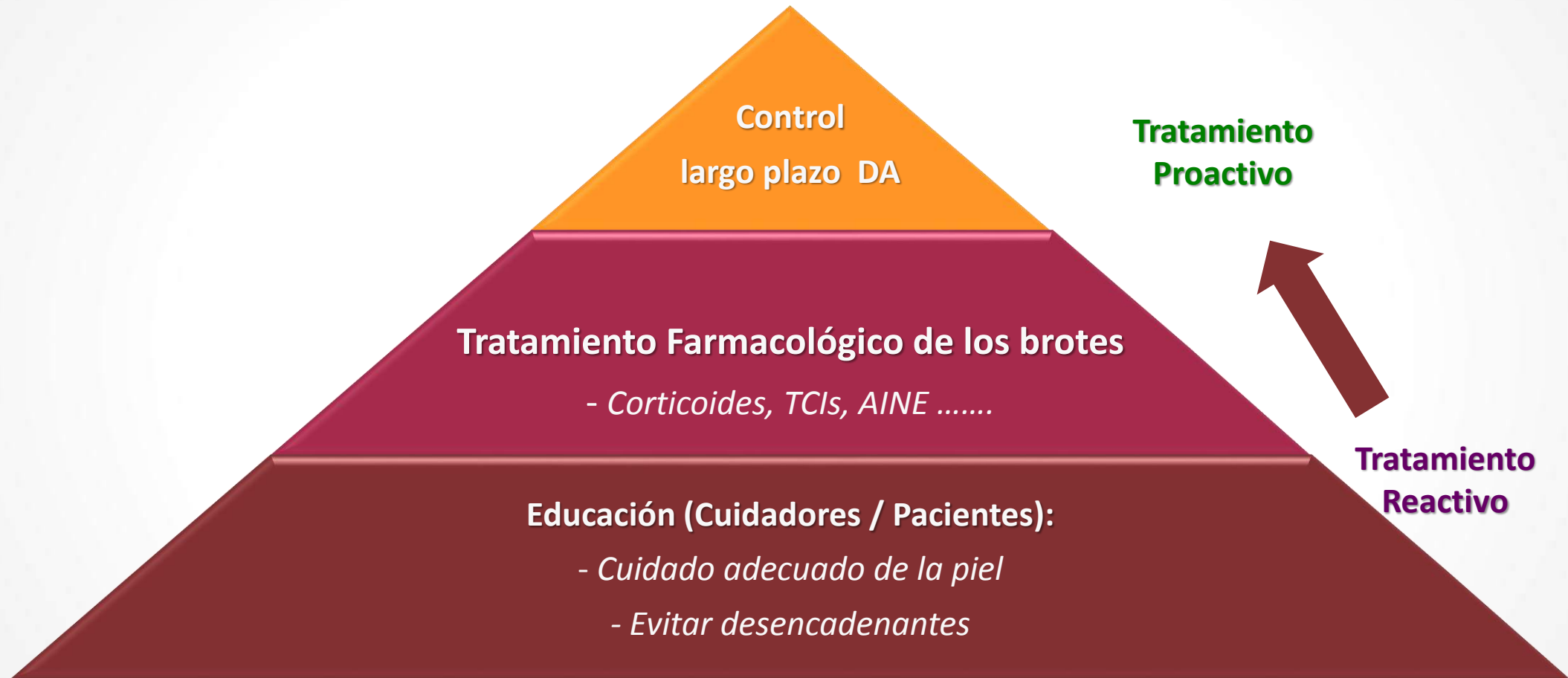


Abordaje multifactorial de la DA



E. Escribano Cerezuelo. Rev Pediatr primaria. 2009;11 Supl 15:s11S14

Abordaje multifactorial tratamiento DA



Luelmo & Moreno, Rev Esp Pediat 2011; 67(5):274-277

Tratamiento proactivo

- 👉 Objetivo: prevenir los brotes.
- 👉 Demostrado: menos brotes y menos fármacos.
- 👉 Tacrolimus 2 noches por semana , 12 meses (estudio CONTROL).
- 👉 También con pimecrolimus y con corticoides.



¿La terapia de mantenimiento es realmente algo nuevo?

Twice weekly fluticasone propionate added to emollient maintenance treatment to reduce risk of relapse in atopic dermatitis: randomised, double blind, parallel group study

John Berth-Jones, Robert J Damstra, Stefan Golsch, John K Livden, Oliver Van Hooftghem, Fulvio Allegra, Christine A Parker

Abstract

Objective To explore the efficacy and safety of fluticasone propionate, cream and ointment, applied twice weekly in addition to maintenance treatment with emollients, in reducing the risk of relapse of

weekly to maintenance treatment with emollients significantly reduced the risk of relapse.

Introduction

Currently no standard management plan exists for the

Department of Dermatology, University Hospital Coventry and Warwickshire NHS Trust, Walsgrave Hospital, Coventry CV4 7 0XK

Twice weekly fluticasone propionate added to emollient maintenance treatment to reduce risk of relapse in atopic dermatitis: randomised, double blind, parallel group study

John Berth-Jones, Robert J Damstra, Stefan Golsch, John K Livden, Oliver Van Hooftghem, Fulvio Allegra, Christine A Parker

10 weeks in the maintenance phase, the disease remained under control in 133 patients (87 using fluticasone propionate twice weekly, 46 using emollient alone), 135 (40 fluticasone propionate, 95 emollient) had experienced a relapse, and 27 had discontinued. Median time to relapse was six weeks for emollient alone compared with more than 16 weeks for additional fluticasone propionate. Patients who applied fluticasone propionate cream twice weekly were 5.8 times less likely (95% confidence interval 3.1 to 10.8, $P < 0.001$) and patients using fluticasone propionate ointment 1.9 times less likely (1.2 to 3.2, $P = 0.010$) to have a relapse than patients applying emollient alone. The groups showed no differences in adverse events.

Conclusion After atopic dermatitis had been stabilised the addition of fluticasone propionate twice

propionate is one of the newer type of topical corticosteroids and has high topical anti-inflammatory effects and a low potential to cause adverse effects because of low systemic absorption and rapid metabolism and clearance.^{1,2} This profile of benefits and risks is advantageous in a long term treatment strategy. This trial aimed to evaluate further the use of fluticasone propionate twice weekly as part of an emollient based maintenance regimen in patients with moderate to severe atopic dermatitis.

Patients and methods

Study design

This was a randomised, double blind, placebo controlled, parallel group, European study. The primary objective was to evaluate the efficacy and safety of the

Oliver Van Hooftghem
Head of department of dermatology

Institute of Medical and Surgical Dermatology,
University of Parma, I-43100 Parma, Italy

Fulvio Allegra
director

continued over

bmj.com: 2005326:1967

Incertidumbres en dermatitis atópica

👉 ¿Se puede prevenir?

👉 ¿Dieta?

👉 ¿Estudios de alergia alimentaria?

👉 ¿Baño?

👉 ¿Emolientes?

Eichenfield JF. Guidelines of care for the management of atopic dermatitis (Section 1 and 2). JAAD 2014

Sidbury R. Guidelines of care for the management of atopic dermatitis (Section 4). JAAD 2014

UN PADRE ATÓPICO: x2-3 RIESGO ATOPIA
AMBOS PADRES ATÓPICOS: x3-5 RIESGO ATOPIA

CARGA GENÉTICA

NO PREVIENE EL DESARROLLO DE ATOPIA

**LACTANCIA MATERNA
EXCLUSIVA**

¡¡NO!! PUEDE FAVORECER LA ALERGIA ALIMENTARIA

**RETRASO INTRODUCCIÓN
SÓLIDOS Y EVITAR ALIMENTOS
MÁS ALERGÉNICOS**

¿Se puede prevenir la dermatitis atópica?

Breastfeeding and introduction of complementary foods during infancy in relation to the risk of asthma and atopic diseases up to 10 years

B. I. Nwaru¹, L. C. A. Craig², K. Allan³, N. Prabhu³, S. W. Turner³, G. McNeill², M. Erkkola⁴, A. Seaton⁵ and G. Devereux³

¹School of Health Sciences, University of Tampere, Tampere, Finland, ²Public Health Nutrition, University of Aberdeen, Aberdeen, UK, ³Child Health, University of Aberdeen, Aberdeen, UK, ⁴Division of Nutrition, Department of Food and Environmental Sciences, University of Helsinki, Helsinki, Finland and ⁵Department of Environmental and Occupational Medicine, University of Aberdeen, Aberdeen, UK

Conclusions

The findings from this study suggest that the duration of breastfeeding and the timing of introduction of complementary foods during infancy seem not to play a major role in the long-term (up to 10 years) risk of asthma and atopic disease in children in general, including children at high risk of asthma and atopic disease.



1. No hay evidencia de que la dieta materna durante el embarazo o la lactancia **Materna o artificial** modifique el curso de la DA.
2. No hay clara evidencia de que las fórmulas hidrolizadas prevengan la DA.
3. No hay datos que apoyen la utilidad de retrasar la introducción de alimentos en niños > 4-6 meses.

The NEW ENGLAND JOURNAL of MEDICINE

ESTABLISHED IN 1812

FEBRUARY 26, 2015

VOL. 372 NO. 9

Randomized Trial of Peanut Consumption in Infants at Risk for Peanut Allergy

George Du Toit, M.B., B.Ch., Graham Roberts, D.M., Peter H. Sayre, M.D., Ph.D., Henry T. Bahnson, M.P.H., Suzana Radulovic, M.D., Alexandra F. Santos, M.D., Helen A. Brough, M.B., B.S., Deborah Phippard, Ph.D., Monica Basting, M.A., Mary Feeney, M.Sc., R.D., Victor Turcanu, M.D., Ph.D., Michelle L. Sever, M.S.P.H., Ph.D., Margarita Gomez Lorenzo, M.D., Marshall Plaut, M.D., and Gideon Lack, M.B., B.Ch., for the LEAP Study Team*



- ❖ 640 niños 4-11 meses.
- ❖ Eccema severo y/o alergia al huevo.
- ❖ Impacto de retrasar consumo de cacahuete hasta los 5 años de vida.
- ❖ Retraso del consumo de cacahuete favorecería su alergia.

ABSTRACT

BACKGROUND

The prevalence of peanut allergy among children in Western countries has doubled in the past 10 years, and peanut allergy is becoming apparent in Africa and Asia. We evaluated strategies of peanut consumption and avoidance to determine which strategy is most effective in preventing the development of peanut allergy in infants at high risk for the allergy.

METHODS

We randomly assigned 640 infants with severe eczema, egg allergy, or both to consume or avoid peanuts until 60 months of age. Participants, who were at least 4 months but younger than 11 months of age at randomization, were assigned to separate study cohorts on the basis of preexisting sensitivity to peanut extract, which was determined with the use of a skin-prick test — one consisting of participants with no measurable wheal after testing and the other consisting of those with a wheal measuring 1 to 4 mm in diameter. The primary outcome, which was assessed independently in each cohort, was the proportion of participants with peanut allergy at 60 months of age.

RESULTS

Among the 530 infants in the intention-to-treat population who initially had negative results on the skin-prick test, the prevalence of peanut allergy at 60 months of age was 13.7% in the avoidance group and 1.9% in the consumption group ($P<0.001$). Among the 98 participants in the intention-to-treat population who initially had positive test results, the prevalence of peanut allergy was 35.3% in the avoidance group and 10.6% in the consumption group ($P=0.004$). There was no significant between-group difference in the incidence of serious adverse events. Increases in levels of peanut-specific IgG4 antibody occurred predominantly in the consumption group; a greater percentage of participants in the avoidance group had elevated titers of peanut-specific IgE antibody. A larger wheal on the skin-prick test and a lower ratio of peanut-specific IgG4:IgE were associated with peanut allergy.

CONCLUSIONS

The early introduction of peanuts significantly decreased the frequency of the development of peanut allergy among children at high risk for this allergy and modulated immune responses to peanuts. (Funded by the National Institute of Allergy and Infectious Diseases and others; ClinicalTrials.gov number, NCT00329784.)

From the Department of Pediatric Allergy, Division of Asthma, Allergy and Lung Biology, King's College London and Guy's and St. Thomas' National Health Service Foundation Trust, London (G.D.T., S.R., A.F.S., H.A.B., M.B., M.F., V.T., G.L.), and the University of Southampton and National Institute for Health Research Respiratory Biomedical Research Unit, Southampton and David Hide Centre, Newport, Isle of Wight (G.R.) — both in the United Kingdom; the Division of Hematology-Oncology, Department of Medicine (P.H.S.), and the Immune Tolerance Network (D.P.), University of California, San Francisco, San Francisco; Rho Federal Systems Division, Chapel Hill, NC (H.T.B., M.L.S.); and the National Institute of Allergy and Infectious Diseases, Bethesda, MD (M.G.L., M.P.). Address reprint requests to Dr. Lack at the Children's Allergy Unit, 2nd Fl, Stairwell B, South Wing, Guy's and St Thomas' NHS Foundation Trust, Westminster Bridge Rd, London SE1 7FL, United Kingdom.

*A complete list of members of the Learning Early about Peanut Allergy (LEAP) Study Team is provided in the Supplementary Appendix, available at NEJM.org.

This article was published on February 23, 2015, at NEJM.org.

N Engl J Med 2015;372:845-53.

DOI: 10.1056/NEJMoa1414856

Copyright © 2015 Massachusetts Medical Society.



Dieta... ¿Raíz del problema?

Excluir comidas de forma empírica en pacientes no seleccionados no ofrece beneficios y puede causar déficits nutricionales importantes.

Gelmetti C. JEADV 2000
Thompson MM. JAAD 2005
Bath-Hextall F. Allergy 2009



¿Estudios de alergia alimentaria “de amplio espectro” a todos los pacientes?

NO

Niños <5 años con dermatitis atópica moderada/severa con enfermedad persistente a pesar de manejo óptimo y/o historia de reacción alérgica inmediata tras comida específica



HUEVO



LECHE



TRIGO



CACAHUETE



SOJA

Sidbury R. JAAD 2014



Riesgos del baño

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581



445



HEALTH & WELLNESS

Are You Bathing Your Baby Too Much?

Improper Care of Infant's Skin May Increase Risk for Eczema



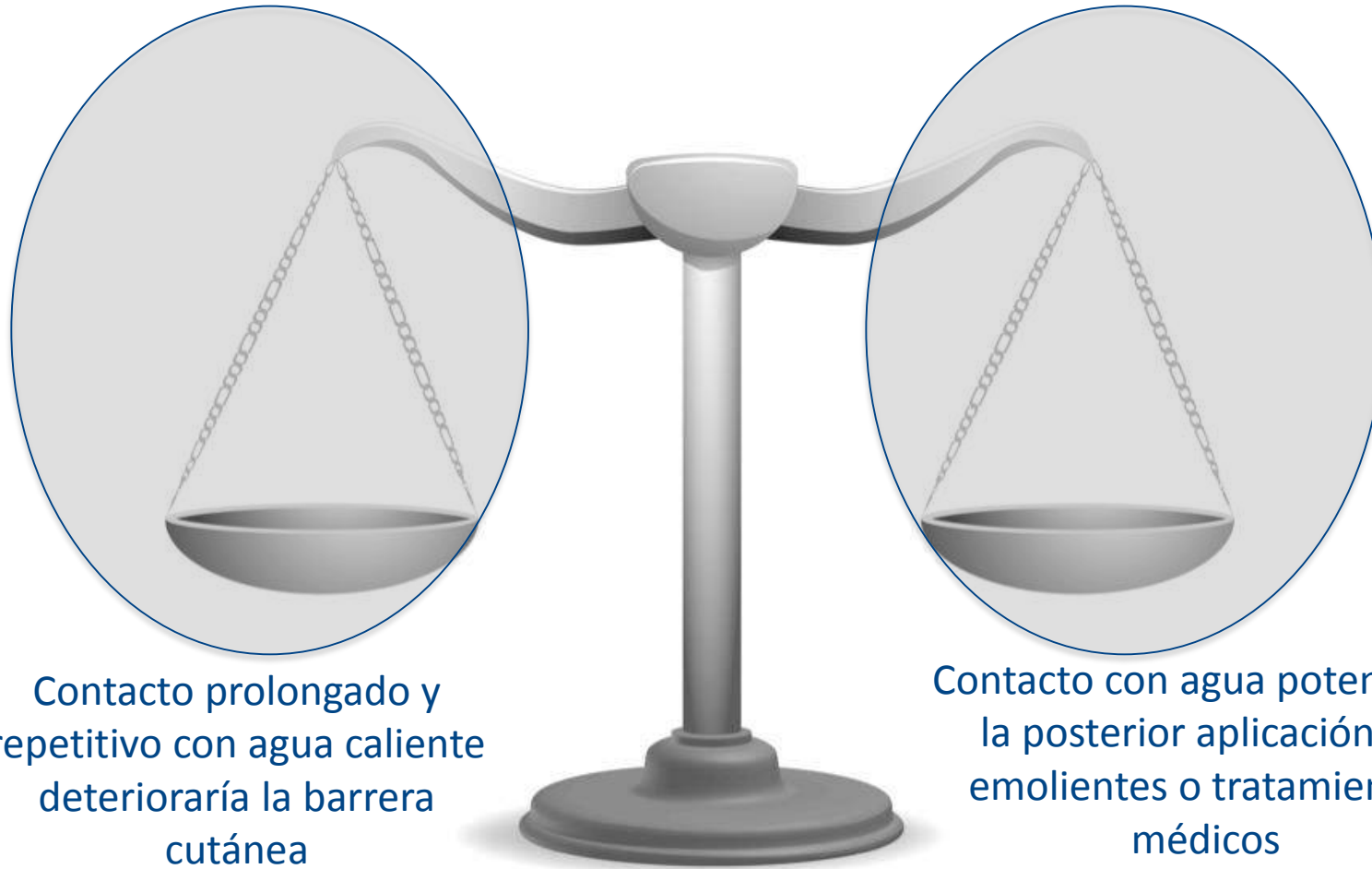
Eczema affects 10% to 20% of children, mainly infants. Too frequent bathing may be one of the causes, researchers suggest. GETTY IMAGES

YOUR PERSONAL JOURNEY
OF DISCOVERY BEGINS

at

ROSEWOOD

A SENSE OF PLACE™



Contacto prolongado y repetitivo con agua caliente deterioraría la barrera cutánea

Contacto con agua potenciaría la posterior aplicación de emolientes o tratamientos médicos (“Empapar y untar”)

Recomendación: al menos 2-3 baños a la semana, cortos, agua no muy caliente, seguidos de emolientes

Hajar T. Dermatitis 2014
Koutroulis I. Clin Pediatr 2014



Journal of
Clinical Medicine

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J Clin Med. 2015 May; 4(5): 970–978.

PMCID: PMC4470210

Published online 2015 May 18. doi: [10.3390/jcm4050970](https://doi.org/10.3390/jcm4050970)

The Importance of Acidification in Atopic Eczema: An Underexplored Avenue for Treatment

[David J. Panther](#) and [Sharon E. Jacob](#)*

Sebastien Barbarot, Academic Editor and Kim Thomas, Academic Editor

Department of Dermatology, Loma Linda University, 11370 Anderson St. Ste. 2400, Loma Linda, CA 92354, USA; E-Mail: dpanther@llu.edu

* Author to whom correspondence should be addressed; E-Mail: sjacob@contactderm.net; Tel.: +1-909-558-4000; Fax: +1-909-558-2891.

Received 2015 Feb 27; Accepted 2015 May 7.

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10 MINUTOS, 2 VECES EN SEMANA



+



ADULTOS

100 ml

½ BAÑERA AGUA

NIÑOS < 12 AÑOS

50 ml

¼ BAÑERA AGUA

Baños de lejía en dermatitis atópica moderada / severa con episodios repetidos de sobreinfección (+/- mupirocina)

Wong S. J Dermatol 2013
Ryan C. Pediatr Dermatol 2013

Sitios de predilección



ARTICLE

Treatment of *Staphylococcus aureus* Colonization in Atopic Dermatitis Decreases Disease Severity

Jennifer T. Huang, MD^{a,b}, Melissa Abrams, MD^{a,b}, Brook Tlougan, MD^{a,b}, Alfred Rademaker, PhD^c, Amy S. Paller, MD^{a,b}

Departments of ^aDermatology, ^bPediatrics, and ^cPreventive Medicine, Northwestern University, Feinberg School of Medicine, Chicago, Illinois

Financial Disclosure: Dr Paller is a consultant for Johnson & Johnson Consumer and Personal Products Worldwide; Drs Huang, Abrams, Tlougan, and Rademaker have no financial relationships relevant to this article to disclose.

What's Known on This Subject

Staphylococcus aureus infection is a major contributor to exacerbations of AD and resistance to therapy. However, suppression of *S aureus* has been poorly studied and is difficult to achieve.

What This Study Adds

This study provides an easy, safe, effective method for *S aureus* suppression on the skin of patients with AD.

ABSTRACT

OBJECTIVES. The goals were to determine the prevalence of community-acquired methicillin-resistant *Staphylococcus aureus* colonization in patients with atopic dermatitis and to determine whether suppression of *S aureus* growth with sodium hypochlorite (bleach) baths and intranasal mupirocin treatment improves eczema severity.

METHODS. A randomized, investigator-blinded, placebo-controlled study was conducted with 31 patients, 6 months to 17 years of age, with moderate to severe atopic dermatitis and clinical signs of secondary bacterial infections. All patients received orally administered cephalexin for 14 days and were assigned randomly to receive intranasal mupirocin ointment treatment and sodium hypochlorite (bleach) baths (treatment arm) or intranasal petrolatum ointment treatment and plain water baths (placebo arm) for 3 months. The primary outcome measure was the Eczema Area and Severity Index score.

RESULTS. The prevalence of community-acquired methicillin-resistant *S aureus* in our study (7.4% of our *S aureus*-positive skin cultures and 4% of our *S aureus*-positive nasal cultures) was much lower than that in the general population with cultures at Children's Memorial Hospital (75%–85%). Patients in the group that received both the dilute bleach baths and intranasal mupirocin treatment showed significantly greater mean reductions from baseline in Eczema Area and Severity Index scores, compared with the placebo group, at the 1-month and 3-month visits. The mean Eczema Area and Severity Index scores for the head and neck did not decrease for patients in the treatment group, whereas scores for other body sites (submerged in the dilute bleach baths) decreased at 1 and 3 months, in comparison with placebo-treated patients.

CONCLUSIONS. Chronic use of dilute bleach baths with intermittent intranasal application of mupirocin ointment decreased the clinical severity of atopic dermatitis in patients with clinical signs of secondary bacterial infections. Patients with atopic dermatitis do not seem to have increased susceptibility to infection or colonization with resistant strains of *S aureus*. *Pediatrics* 2009;123:e808–e814

www.pediatrics.org/cgi/doi/10.1542/peds.2008-2217

doi:10.1542/peds.2008-2217

This trial has been registered at www.clinicaltrials.gov (Identifier: NCT00179959).

Dr Huang's current affiliation is Department of Dermatology, University of Colorado Health Sciences Center, Denver, CO.

Dr Tlougan's current affiliation is Department of Dermatology, New York University School of Medicine, New York, NY.

Key Words

eczema, infection, bleach, sodium hypochlorite, mupirocin, community-acquired methicillin-resistant *Staphylococcus aureus*

Abbreviations

AD—atopic dermatitis
MRSA—methicillin-resistant *Staphylococcus aureus*
CA—community acquired
EASI—Eczema Area and Severity Index
IGA—Investigator's Global Assessment
BSA—body surface area
MSSA—methicillin-sensitive *Staphylococcus aureus*

Accepted for publication Jan 13, 2009

Address correspondence to Amy S. Paller, MD, 676 N. St Clair St, Suite 1600, Chicago, IL 60611. E-mail: apaller@northwestern.edu.

PEDIATRICS (ISSN Numbers: Print, 0031-4005; Online, 1098-4275). Copyright © 2009 by the American Academy of Pediatrics



ICS
Y OF PEDIATRICS

ARTICLE

Treatment of *Staphylococcus aureus* Colonization in Atopic Dermatitis Decreases Disease Severity

Jennifer T. Huang, MD^{a,b}, Melissa Abrams, MD^{a,b}, Brook Tlougan, MD^{a,b}, Alfred Rademaker, PhD^c, Amy S. Paller, MD^{a,b}

Departments of ^aDermatology, ^bPediatrics, and ^cPreventive Medicine, Northwestern University, Feinberg School of Medicine, Chicago, Illinois

- 👉 Estudio randomizado controlado con 31 niños con eccema sobreinfectado.
- 👉 Cefalexin por 14 días y después se randomizan:
 - ❖ Grupo A: Baños de lejía (1/2 vaso, 3-5 cc por 4,5 l) 2 x sem y mupirocina intranasal 5 dias al mes x 3 m.
 - ❖ Grupo B: Baños sólo con agua y vaselina intranasal.
- 👉 EASI mejor en Grupo A (...y sólo en el cuerpo y no en la cara).

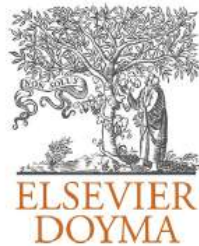






*Cortesía Dra E. Baselga





ACTAS Derma-Sifiliográficas

Full English text available at
www.actasdermo.org



CASO CLÍNICO

Vendajes húmedos: nuestra experiencia



C. Albarrán-Planelles*, D. Jiménez-Gallo, M. Linares-Barríos y A. Martínez-Rodríguez

UGC de Dermatología Médico-Quirúrgica y Venereología, Hospital Universitario Puerta del Mar, Servicio Andaluz de Salud, Cádiz, España

PALABRAS CLAVE
Dermatitis atópica;
Vendajes húmedos;
Corticosteroides

Resumen En la actualidad disponemos de un importante arsenal terapéutico para la dermatitis atópica grave. Entre los tratamientos sistémicos cabe destacar entre otros la ciclosporina, los glucocorticoides, la azatioprina, el metotrexato, el mofetil micofenolato o el omalizumab. La terapia con vendajes húmedos oclusivos (*wet-wrap*) puede suponer una excelente alternativa en pacientes en los que se pretende evitar o reducir el uso de tratamientos sistémicos.

Hasta el momento los vendajes húmedos se han considerado como una alternativa en los casos de dermatitis atópica grave de la infancia. Aportamos nuestra experiencia en un grupo de 7 pacientes adultos, 5 de ellos con dermatitis atópica y 2 con prurigo nodular, destacando los resultados satisfactorios obtenidos, así como los escasos efectos secundarios observados.

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Filtros ▾

Aproximadamente 38 resultados



La técnica de compresas húmedas en dermatitis atópica

de Farmacosalud

Hace 1 año • 275 visualizaciones

El Dr. Raúl de Lucas, dermatólogo, desgana las ventajas que tienen las compresas húmedas con un emoliente en el tratamiento ...

HD



Nuevas alternativas para la dermatitis atópica

de Farmacosalud

Hace 1 año • 69 visualizaciones

HD



Tratamiento gasas húmedas- Dermatitis atópica

de ClínicaDermik

Hace 1 año • 855 visualizaciones

Las compresas húmedas son una herramienta muy útil para el tratamiento intensivo de la dermatitis atópica cuando las medidas ...



6 // Otras alternativas terapéuticas para la dermatitis atópica

de Multilind

Hace 10 meses • 153 visualizaciones

Responde la Doctora Eulalia Baselga. Dermatóloga Pediátrica. Hospital de San Pau y Clínica Dermik Barcelona Otras ...

HD



***Maneras informales
de hacer
las curas húmedas***

- ☪ Ducha o baño corto.
- ☪ Agua no muy caliente.
- ☪ Jabón suave, sin espuma













*Generalmente se pone un pijama seco
encima del humedecido para que el niño
no pase frío*







En zonas pequeñas, pueden usarse gasas o compresas, y tubifast para sujetarlas






O, todavía más fácil...







Educación terapéutica en dermatitis atópica



ACTAS
Dermo-Sifiliográficas

Full English text available at
www.actasdermo.org

ORIGINAL

**Dermatitis atópica desde la perspectiva del paciente:
desencadenantes, cumplimiento de las
recomendaciones médicas y control de la enfermedad.
Estudio DATOP**

F.J. Ortiz de Frutos^a, A. Torrelo^b, R. de Lucas^c, M.A. González^d,
A. Alomar^e, Á. Vera^f, S. Ros^g, A.M. Mora^h y J. Cuervo^{i,*}

^a Hospital Universitario 12 de Octubre, Madrid, España
^b Hospital Infantil Universitario Niño Jesús, Madrid, España
^c Hospital Universitario La Paz, Madrid, España
^d Hospital Sant Joan de Deu, Barcelona, España
^e Institut Universitari Dexeus, Barcelona, España
^f Complejo Hospitalario Carlos Haya, Málaga, España
^g Hospital de la Santa Creu i Sant Pau, Barcelona, España
^h Departamento Médico de Astellas Pharma, Madrid, España
ⁱ LA-SER Outcomes, Oviedo, España

Recibido el 3 de abril de 2013; aceptado el 17 de enero de 2014

Junio 2014



Resultados

El 76,8% de los adultos y el 82,8% de los pacientes pediátricos empleaban emolientes durante el episodio de lesiones activas.

El tratamiento tópico recomendado con más frecuencia fueron los corticoides (72% adultos y 85,3% pacientes pediátricos).

Los **desencadenantes** más frecuentes fueron:

- Cosméticos (44% adultos, 34,5% pediátricos),
- Ropa (41,6% adultos; 37,1% pediátricos),
- Ácaros/polvo (40% adultos, 36,2% pediátricos),
- Cambios bruscos de temperatura (36% adultos, 42,2% pediátricos)
- Estrés (40% adultos; 36,2% pediátricos).

Ortiz de Frutos FJ et al. Actas Demosifiliogr. 2014; 105:487-96

eps



www.fppt.info

Muchos pacientes con DA Poco tiempo



Muchos pacientes con DA.

Poco tiempo

La terapia de grupo es una buena opción.



Escuela de la dermatitis atópica

👩‍⚕️ ¿Qué es la EDA?

- ❖ **La Escuela de la Dermatitis Atópica (EDA)** es un proyecto desarrollado por personal médico y sanitario con el único objetivo de promover la educación sanitaria y terapéutica en Dermatitis atópica. Estamos convencidos de que el conocimiento es imprescindible para el control adecuado de la enfermedad.

👩‍⚕️ ¿Quiénes somos?

- ❖ **Matilde Riquelme y Ruth García Martínez (pediatras).**
- ❖ **Ángela Hernández y Antonio Torrelo (dermatólogos del Hospital Niño Jesús).**
- ❖ **Marta Feito y Raúl de Lucas (dermatólogos del Hospital La paz).**

👩‍⚕️ ¿A quién va dirigida?

- ❖ **A pacientes y familiares con dermatitis atópica.**
- ❖ **Es imprescindible inscribirse a través del correo electrónico:**
escueladeladermatitisatopica@gmail.com.

👩‍⚕️ ¿Dónde y cuándo?

- ❖ El martes, 22 de noviembre.
- ❖ Horario:
 - ✓ 17:00 Bienvenida.
 - ✓ 17:30 Reunión.
 - ✓ Duración aproximada 2 horas y media.
- ❖ Lugar: Hospital La Paz:
 - ✓ Aula Ortiz Vázquez (edificio Hospital General, planta baja).
 - ✓ Dirección: Pº de la Castellana, 261.
 - ✓ Metro: Begoña, salida Hospital La Paz.

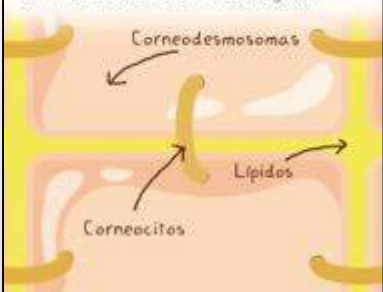


Escuela de la Dermatitis Atópica

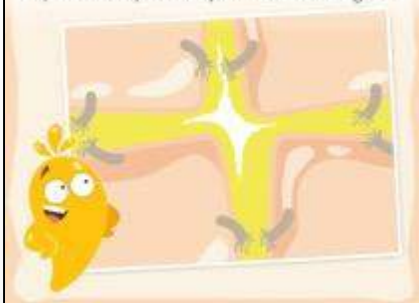
¿Hay avances en Dermatitis atópica?

¿sabemos a qué se debe la DA?

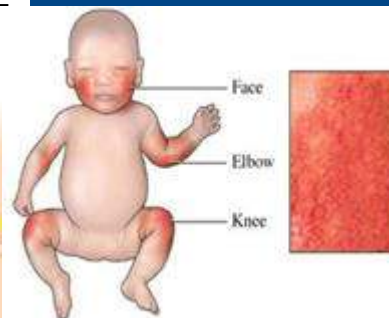
«La epidermis -señala Glupi- está formada por los corneocitos que aparecen muy juntos y unidos por los corneodesmosomas y los lípidos. Todos ellos forman una barrera física contra los alérgenos.»



«¿Alérgenos? ¿Son como alienígenas?» pregunta Álex. «Sí, parecidos!» contesta Glupi. «En las pieles atópicas, como la tuya, los corneodesmosomas son más frágiles de lo normal y se rompen. Los corneocitos se separan dejando huecos por donde pueden entrar los alérgenos.»



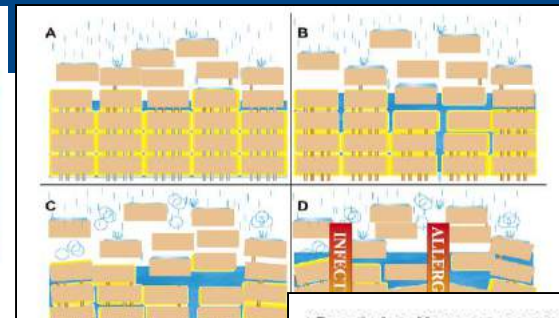
«La piel -explica Glupi- es una barrera que protege al organismo del exterior y puede llegar a pesar ¡hasta cinco kilos! Álex memoriza los nombres de sus tres capas: epidermis, dermis e hipodermis.»



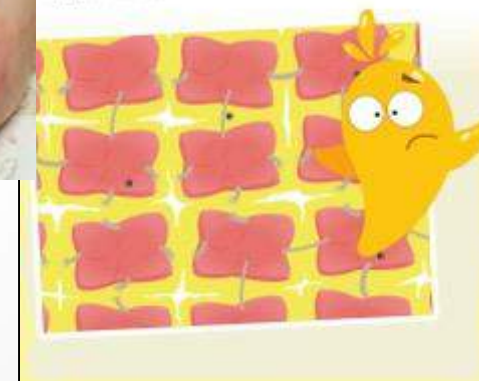
Glupi muestra a Álex cómo también por esos huecos la piel pierde el agua que contiene y se seca. Álex comprende ahora por qué es tan importante tener la piel siempre bien hidratada.

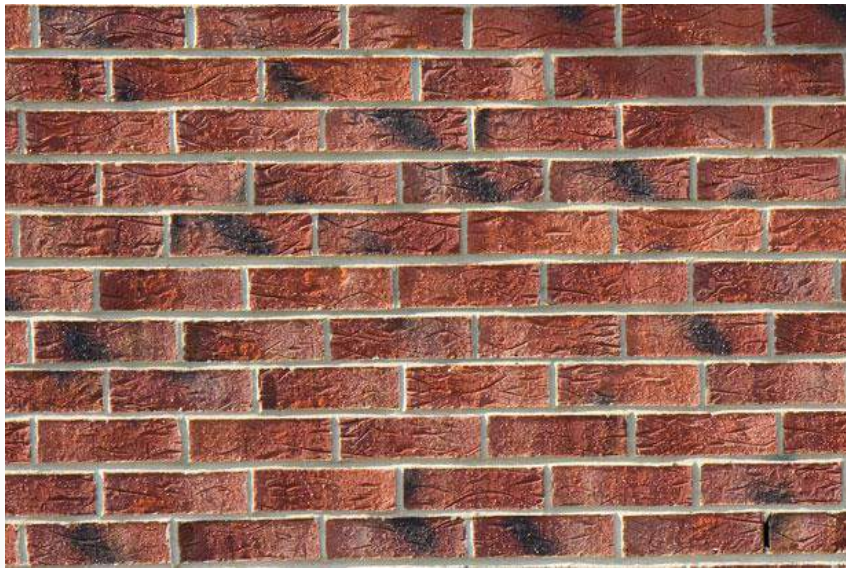
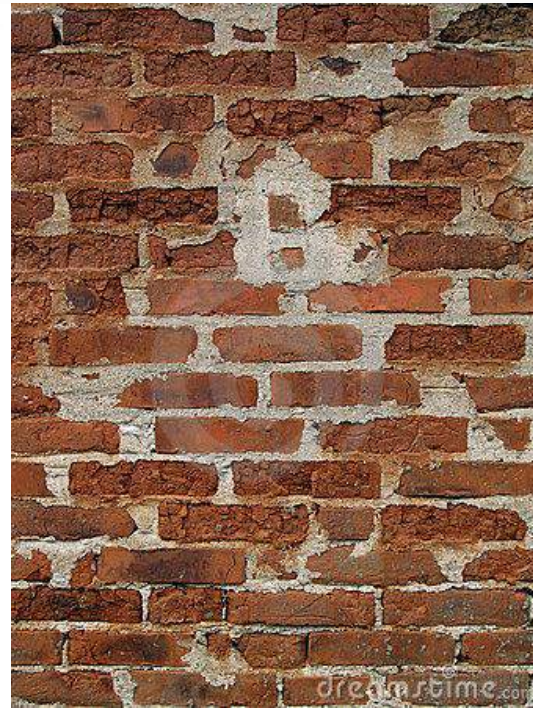


El conocimiento mejora la evolución de la enfermedad



Cuando los alérgenos traspasan la epidermis y se cueitan dentro de la piel, provocan una inflamación que pica mucho.

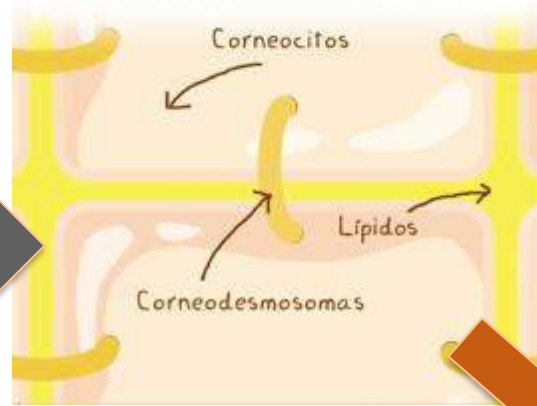




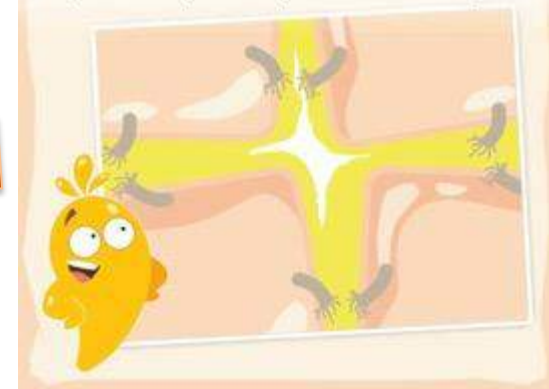
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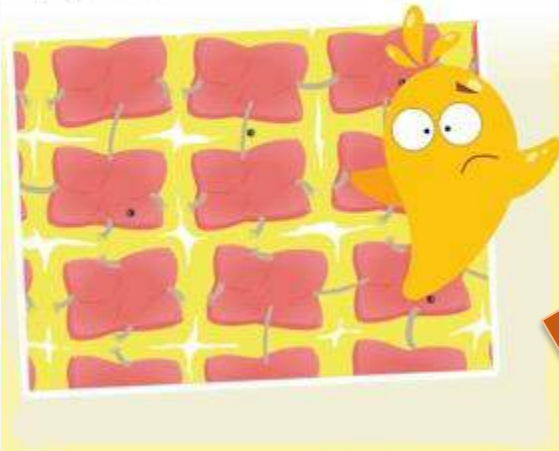
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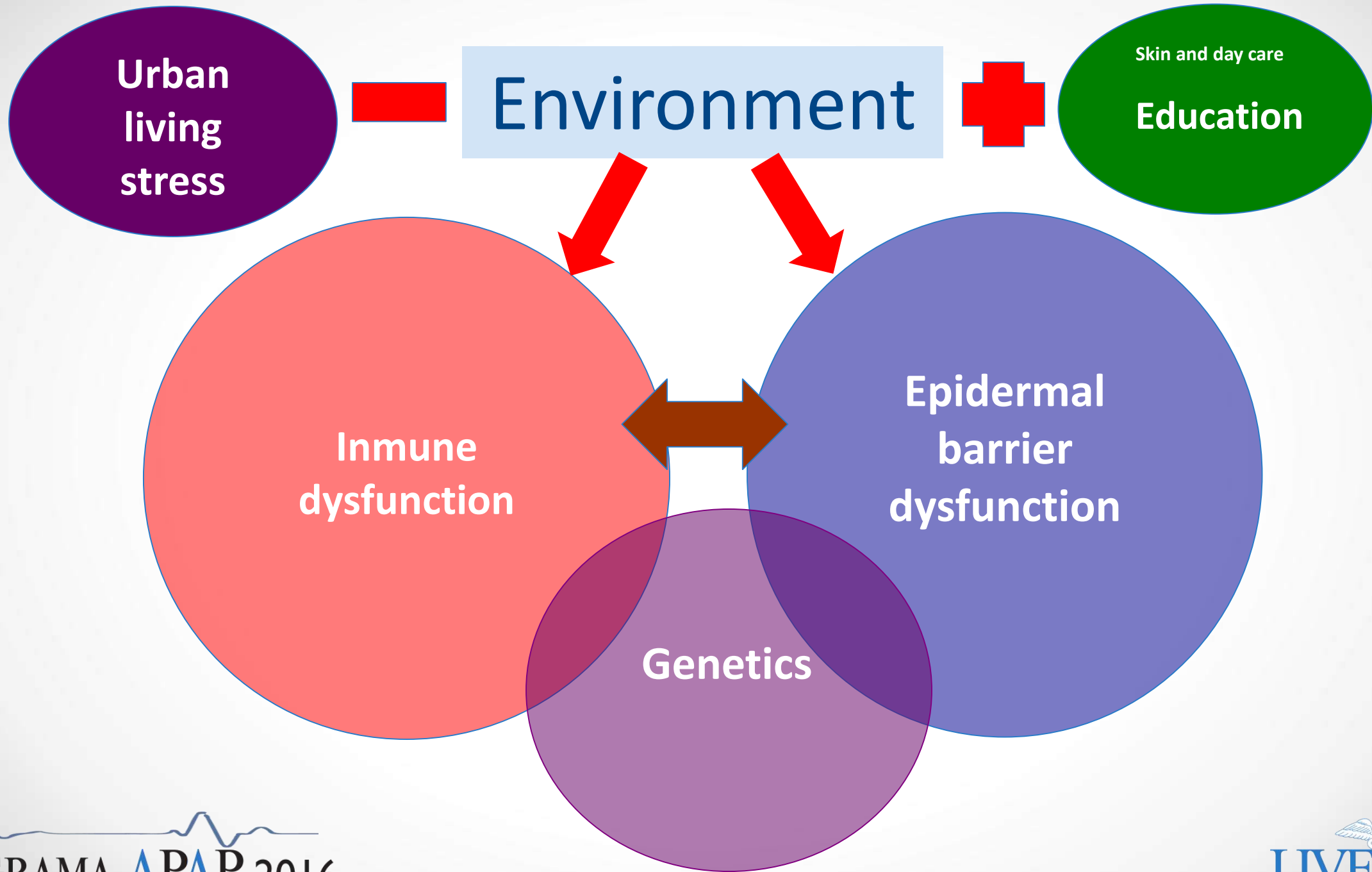
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Educación terapéutica

- ❖ Conjunto de actividades dirigidas a enseñar a los pacientes a manejar su enfermedad crónica.
- ❖ No se limitan al esfuerzo informativo, sino que deben incluir actividades específicas donde se resuelvan sus dudas, se estimule su motivación y se detecten problemas que impiden el cumplimiento.
- ❖ Frecuente en apoyo a la adolescencia, enfermos cardiológicos, maternidad... pero no en dermatología.

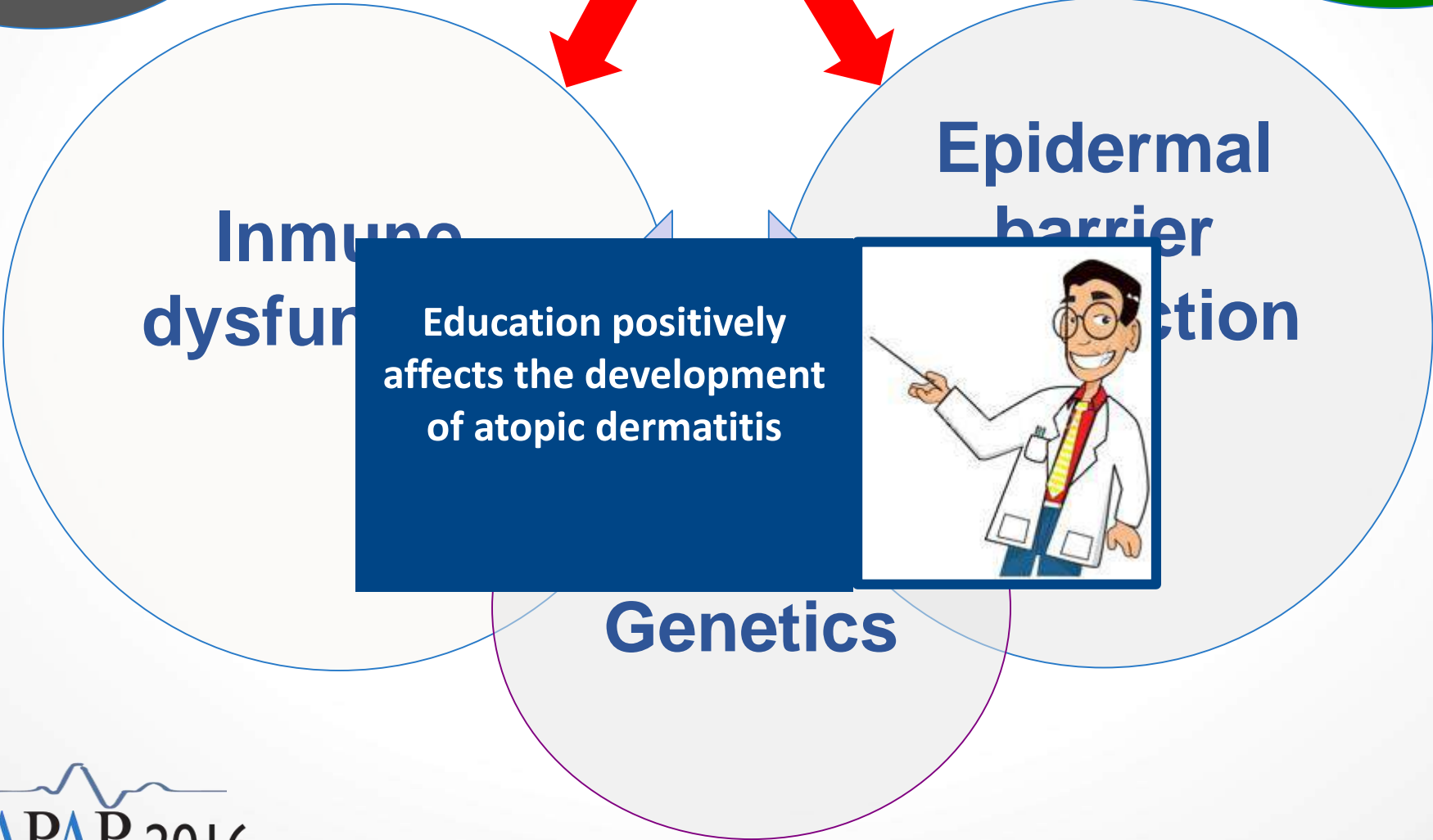


Urban living stress

Environment



Skin and day care
Education



La información es importante...

👨‍⚕️ Ha de estar contrastada.

👨‍⚕️ Ha de ser fiable.

👨‍⚕️ Ha de ser adecuada a la formación del paciente.

👨‍⚕️ ¿Dónde obtienen nuestros pacientes la información?

What is wrong with me doctor google?



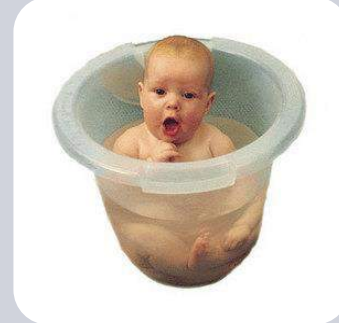
Información no es lo mismo que educación sanitaria



Los pacientes toman el control de su enfermedad



Tratar el brote



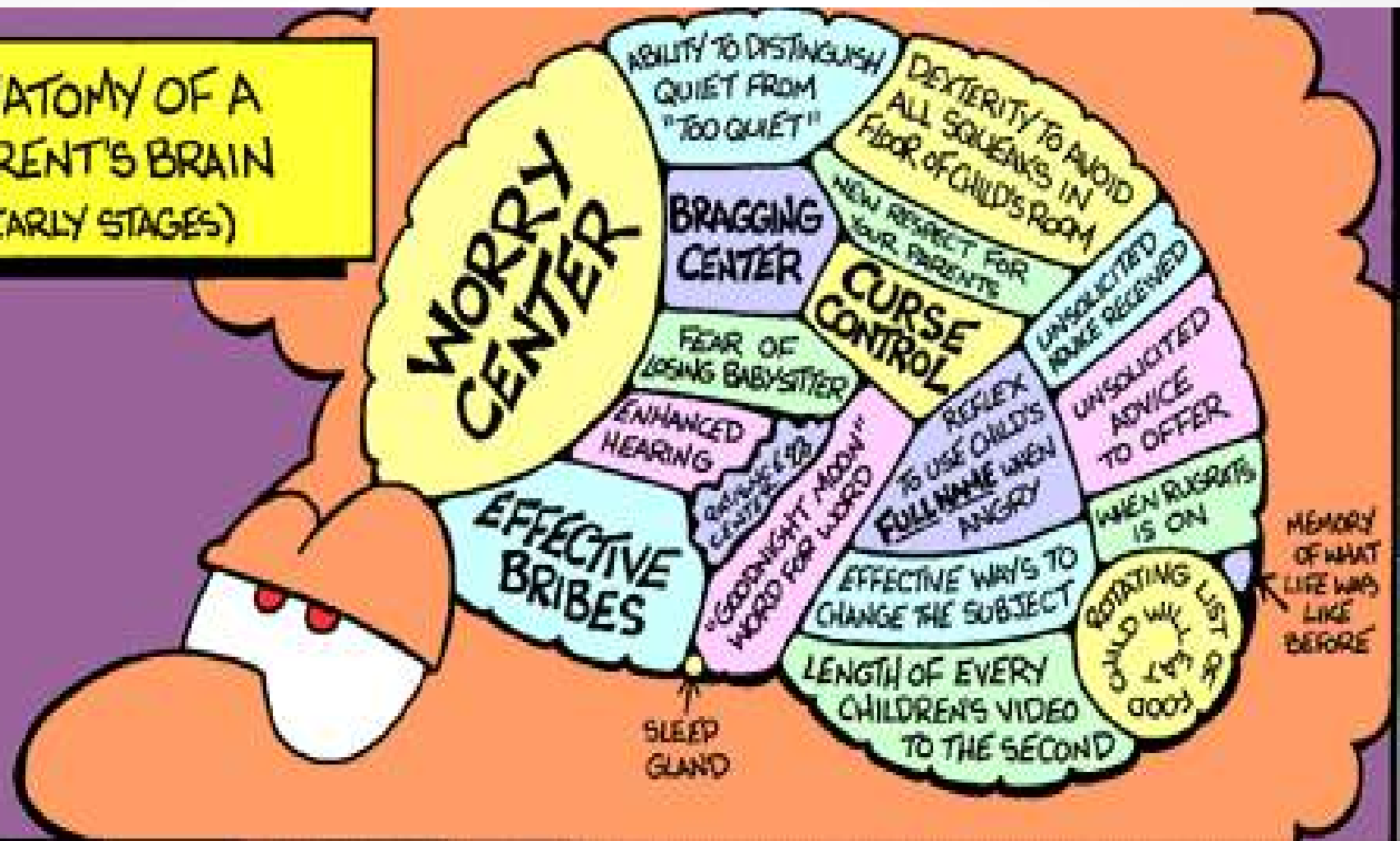
Reparar barrera



Tratamiento proactivo

ANATOMY OF A PARENT'S BRAIN (EARLY STAGES)

ATLANTIC FEATURE ©1998 MARK PARISI



MARK PARISI

Nuestras propias conclusiones

👨‍⚕️ **Se aclaran conceptos básicos.**

- ❖ Tenemos experiencia en los errores más frecuentes y los abordamos.
- ❖ Nivel adecuado a su comprensión pero con rigor científico.

👨‍⚕️ **Todos los padres tienen las mismas dudas.**

- ❖ Aprenden de las respuestas a los otros.
- ❖ Alivia sentimientos de culpa.

👨‍⚕️ **Observamos un mejor control de la enfermedad en pacientes que han asistido a la EDA (SCORAD).**

Asian Nursing Research 9 (2015) 85–93

Contents lists available at ScienceDirect

Asian Nursing Research

Journal homepage: www.asian-nursingresearch.com

Review Article

Educational Programs for the Management of Childhood Atopic Dermatitis: An Integrative Review

Yunmi Lee, PhD, RN, Jina Oh, PhD, RN*

Department of Nursing, Institute of Health Science, Jeju University, Jeju, South Korea

ARTICLE INFO

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Received 28 November 2013
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Accepted 20 April 2015

Keywords:
atopic dermatitis
child
chronic illness
education
review

SUMMARY

Purpose: The purpose of this integrative review was to synthesize the available research on educational programs for the management of childhood atopic dermatitis.
Methods: Articles were retrieved from the following databases: Cumulative Index to Nursing and Allied Health Literature, Cochrane Library, PubMed, and SCOPUS. Inclusion criteria were publication in the English or Korean language prior to March 2013, as a peer-reviewed empirical study focused on educational programs for childhood atopic dermatitis.
Results: Fifteen papers met the inclusion criteria. Four themes were derived from the data: (a) children of all ages and symptom severity, and their families as learners; (b) well-trained and family-preferred health professionals as educators; (c) long-term follow-up with diverse interventions as educational methods; and (d) quality of life for the child and family as educational goals.
Conclusions: This review indicates the challenges that health professionals face in improving symptoms of atopic dermatitis. The identified strategies can be used in the development of more effective evidence-based programs. Future studies should focus on the development and evaluation of educational programs that include these themes.

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MDPI
Journal of Clinical Medicine

J. Clin. Med. 2016, 5(2), 231–242
Published online 2016 Jan 27; doi:10.3390/jcm5020231

PMCID: PMC4707022

Interventions to Increase Treatment Adherence in Pediatric Atopic Dermatitis: A Systematic Review

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Sebastian Barbarot, Academic Editor

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³Department of Public Health Sciences, Wake Forest School of Medicine, Winston-Salem, NC 27157-1071, USA
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Abstract

Poor adherence to treatment is a major factor limiting treatment outcomes in patients with atopic dermatitis. The purpose of our systematic review is to identify techniques that have been tested to increase treatment adherence in atopic dermatitis. A MEDLINE search was performed for clinical trials focusing on interventions used to increase adherence in atopic dermatitis. Four articles were retrieved. References of these studies were analyzed yielding three more trials. The seven results were evaluated by comparing the intervention used to improve adherence, how adherence was assessed, and the outcome of the intervention tested. Different approaches to increase adherence such as written eczema action plans, educational workshops, extra office visits, and use of an atopic dermatitis educator were evaluated. All interventions increased adherence rates or decreased severity in patients, except for two. The MEDLINE search yielded limited results due to a lack of studies conducted specifically for atopic dermatitis and adherence was measured using different methods making the studies difficult to compare. Interventions including patient education, eczema action plans, and a quick return for a follow-up visit improve adherence, but based on the lack of clinical trials, developing new techniques to improve adherence could be as valuable as developing new treatments.

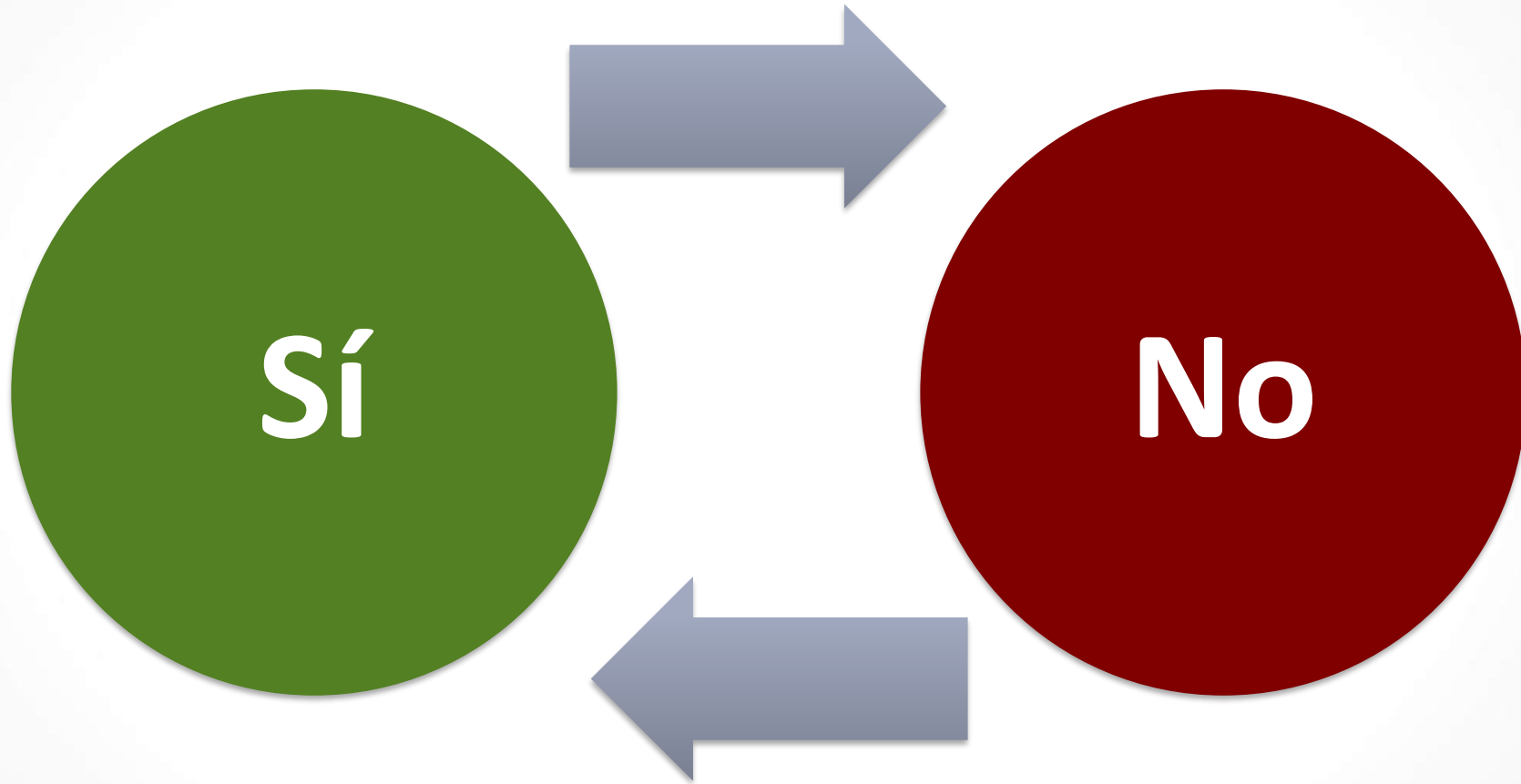
Keywords: eczema; atopic dermatitis; atopic eczema; allergy; itch; skin disease; treatment; adherence; non-adherence

Pediatric Dermatology Vol. 30 No. 2 199–206, 2013

Therapeutic Patient Education in Children with Atopic Dermatitis: Position Paper on Objectives and Recommendations

Sébastien Barbarot, M.D.,* Claire Bernier, M.D.,* Mette Deleuran, M.D.,†
Linda De Raeve, M.D.,‡ Lawrence Eichenfield, M.D.,¶ May El Hachem, M.D.,#
Carlo Gelmetti, M.D.,** Uwe Gielert, M.D.,†† Peter Lio, M.D.,‡‡
Danielle Marcoux, M.D.,¶¶ Marie-Anne Morren, M.D.,## Antonio Torrelo, M.D.,***
Jean Francois Stalder, M.D.,*

¿Es necesaria una EDA para pediatras??



¿Por qué somos como somos?



Conocimientos



Creencias

Experiencias



Hábitos

Actitudes



Educación para la Salud en Dermatitis Atópica:

"EL RASCAR SE VA A ACABAR"

DIRIGIDO A:

Médicos Pediatras y Médicos Residentes de Pediatría.

ÁREA TEMÁTICA:

Prevención y Promoción de la Salud

OBJETIVO:

Capacitar a los participantes para que adquieran los conocimientos, las actitudes y las herramientas necesarias para un correcto tratamiento de la Dermatitis Atópica.

METODOLOGÍA:

Curso mixto presencial y online.
La parte presencial del curso será participativa y dinámica.
Se darán breves explicaciones teóricas que podrán ser ampliadas con los recursos online.

DURACIÓN Y NÚMERO DE PLAZAS:

- 3 horas presenciales y 9 horas online.
- 20 plazas

FECHA Y HORARIO DEL CURSO:

- Presencial: 22 de octubre de 2013 de 16:00 a 19:00
- Online: 1 de octubre al 31 de diciembre del 2013

LUGAR DE CELEBRACIÓN:

Hospital Infantil de La Paz (Edificio Hospital General, Aula Ortiz Vázquez).
Paseo de la Castellana 261. Madrid

COORDINACIÓN Y PROFESORADO:

- Dra. Matilde Riquelme Pérez. Pediatra. C.S. La Choperá. Alcobendas Formadora en EpS/PS.
- Dra. Ángela Hernández. Dermatóloga. Hospital Infantil Niño Jesús, Madrid
- Dr. Raúl de Lucas. Dermatólogo. Hospital Infantil de La Paz, Madrid

PROGRAMA:

- Presentación de los docentes y de los discentes.
- Expectativas y experiencias.
- Reconocimiento de la enfermedad
 - Factores desencadenantes
 - Fisiopatología
 - Manifestaciones clínicas
 - Diagnóstico diferencial
- Fundamentos diagnósticos y terapéuticos

INFORMACIÓN E INSCRIPCIONES:

<http://www.epsdermatitisatopica.es/>



EDUCACIÓN PARA LA SALUD



EpS en dermatitis atópica: conclusiones

- 👉 He estado atento durante tres horas: ¡milagro!
- 👉 Me he dado cuenta de que hacía cosas distintas a las que vosotros recomendáis.
- 👉 He aprendido cosas nuevas (baños de lejía, curas húmedas).
- 👉 **He aprendido a motivar a mis pacientes.**

Cada día hacemos la EDA



CONTINUING MEDICAL EDUCATION

**Compassionate care: Enhancing physician–patient
communication and education in dermatology**

Part I: Patient-centered communication

Tien V. Nguyen,^{a,c} Judith Hong, MD,^a and Neil S. Prose, MD^b
San Antonio, Texas; San Francisco, California; and Durham, North Carolina

**Compassionate care: Enhancing physician–patient
communication and education in dermatology**

Part II: Patient education

Judith Hong, MD,^a Tien V. Nguyen,^{a,b} and Neil S. Prose, MD^c
San Francisco, California; San Antonio, Texas; and Durham, North Carolina

Consejos

- 👉 Sentarse.
- 👉 Procurar llamar al paciente por su nombre (ideal al menos 3 veces).
- 👉 Estar en lo que hay que estar (no parecer que te vas).
- 👉 Evitar **interrupciones** (teléfono, enfermera, etc).
- 👉 Alabar al equipo que le va a tratar (enfermera, residente, etc).
- 👉 Empatizar con el paciente y la familia.
 - ❖ Si el paciente se enfada , preguntar el motivo.
 - ❖ Frases como “ojalá las cosas fueran diferentes” o “ la medicina pudiera tratar esto”... ayudarán a mejorar la relación.
- 👉 Considerar fuentes de stress que pueden preocupar al paciente.



Técnicas que aumentan el cumplimiento

- 👉 Educar al paciente (dar información, hablar de expectativas, etc)
- 👉 Poner las cosas lo más fácil posible.
- 👉 Tratamiento cosméticamente agradable.
- 👉 Información escrita (estudios que demuestran que a los 30 minutos no recuerdan casi nada).
- 👉 Valorar el tiempo disponible.
- 👉 Coste: ¿el paciente quiere y puede?.





Pregunta 4

¿Cuál es la lesión fundamental y diagnóstica del acné?

1. El comedón.
2. La pápula.
3. La pústula.
4. El habón.



Acné vulgar o polimorfo...

Enfermedad cutánea crónica del folículo pilosebáceo, de etiología multifactorial y carácter autolimitado.

Localización: zonas con mayor densidad de glándulas sebáceas.

Lesiones: comedones, pápulas , pústulas, nódulos, quistes, cicatrices.



Pregunta 5

¿Cuál es vuestro diagnóstico?

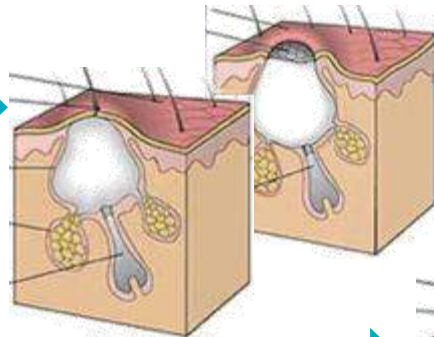
1. Acné conglobata.
2. Acné comedoniano.
3. Acné pápulopustuloso.
4. Acné cicatricial.



Microcomedón
Formación

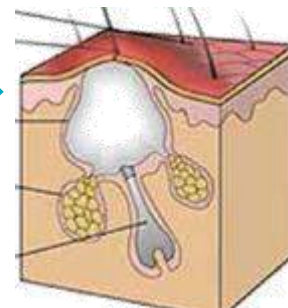
Excesiva producción de sebo

Hiperqueratinización

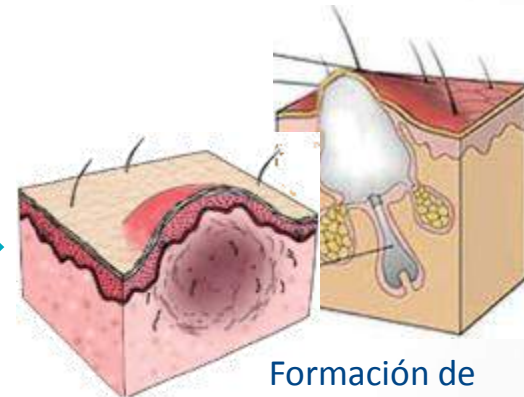


Formación de Comedones
cerrados y abiertos

Colonización *P. acnes*



Inflamación y
formación de pápulas



Formación de
pústulas y quistes

Cicatrices



4 factores claves en
acné

Epidemiología

- 👉 **Incidencia:** hasta el 85% de la población.
- 👉 **Mayor prevalencia** en la pubertad y adolescencia.
- 👉 **Incidencia mayor** en varones, formas más graves (2 - 7%).
- 👉 **Acné tardío y persistente** en mujeres.
- 👉 **Raza blanca.**
- 👉 **Factores genéticos.** Herencia AD con penetrancia variable.

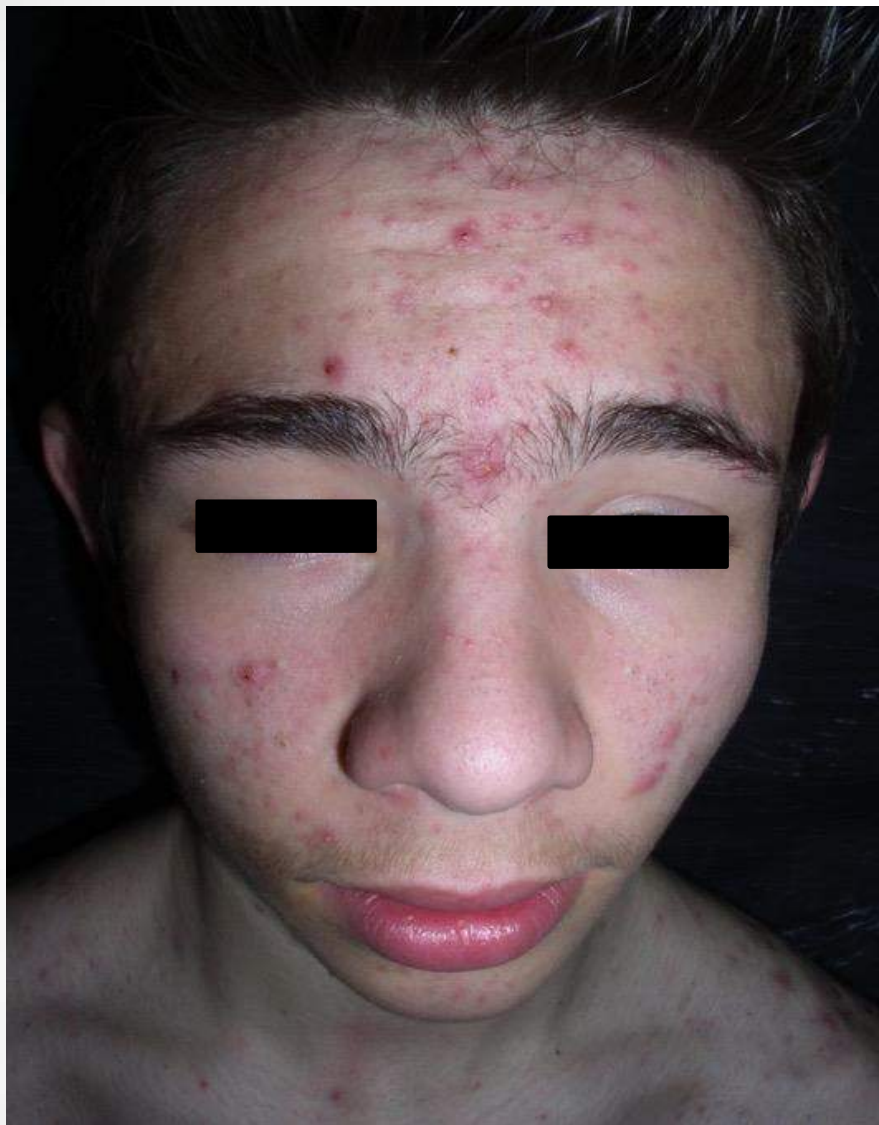
Importancia del acné

👨‍⚕️ “La elevada incidencia y prevalencia del acné hace que sea considerado por los pacientes e incluso por muchos médicos como un **proceso fisiológico**, propio de una época de la vida, más que una verdadero proceso patológico de la piel.”



👉 15-20% motivo consulta en dermatología!!!

👉 Motivo muy frecuente de consulta “colateral” en Atención Primaria.

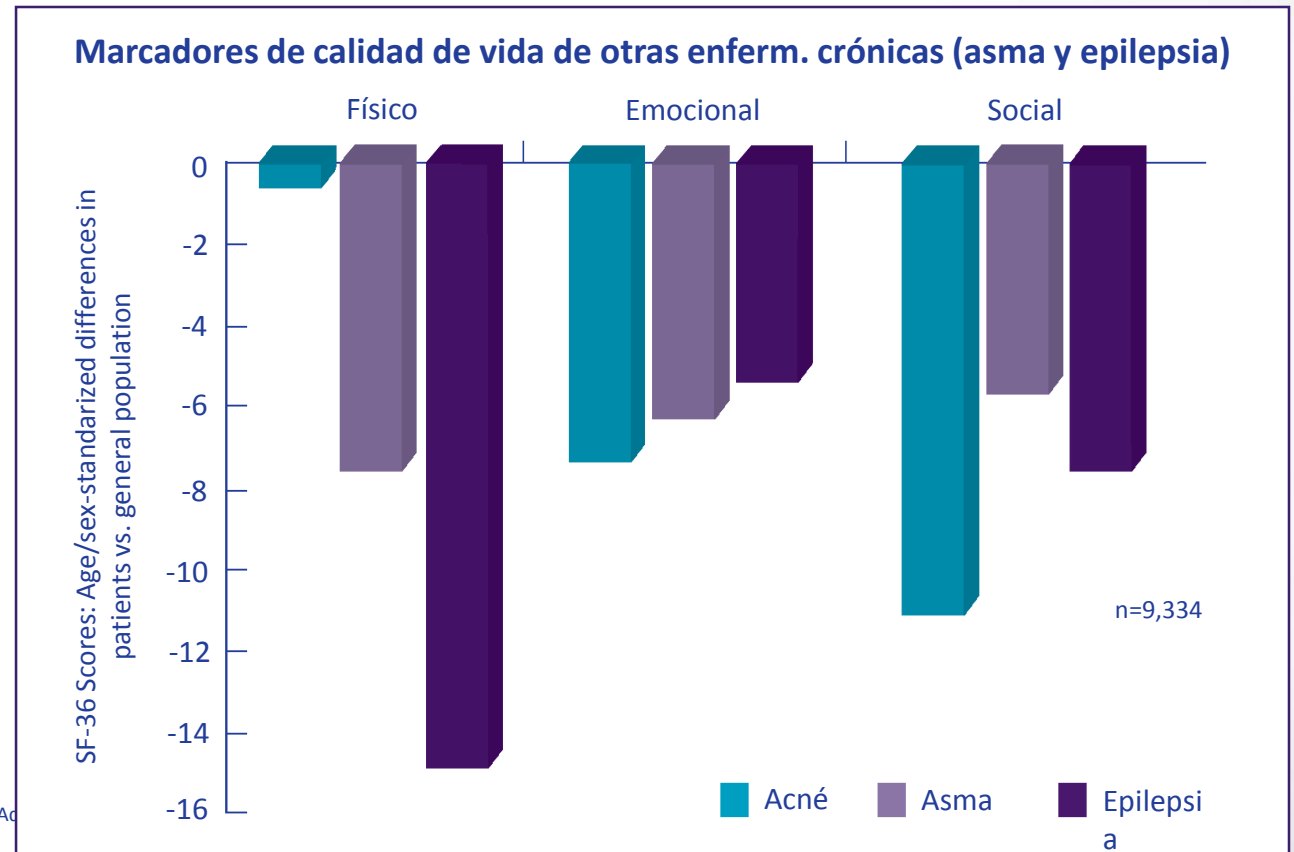
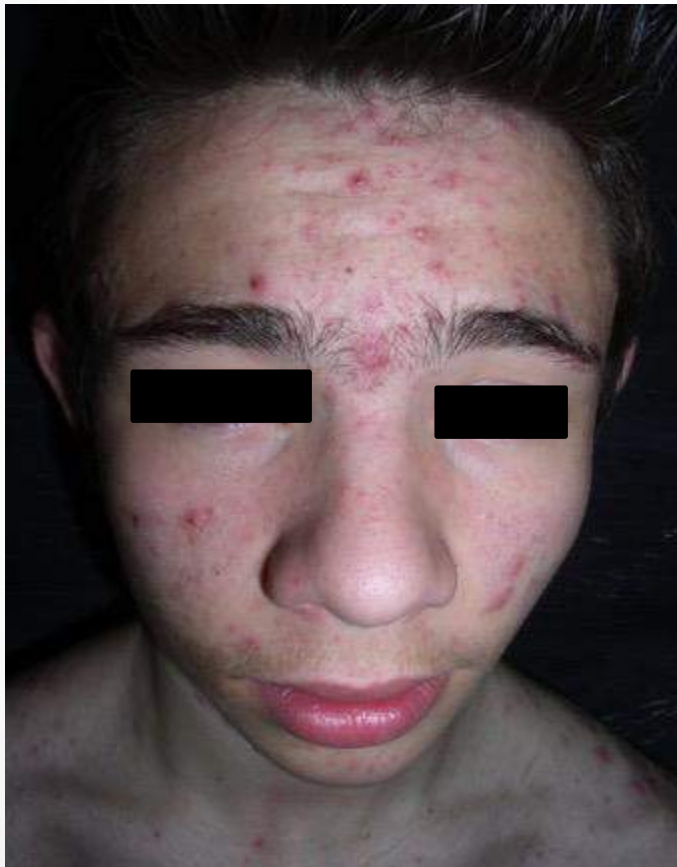


- 👉 15-20% motivo consulta en Dermatología!!!
- 👉 Motivo muy frecuente de consulta “colateral” en Atención Primaria.

Acné: Impacto en la calidad de vida

👨‍⚕️ Alto impacto en la calidad de vida del paciente:

❖ Mayor afectación que otras patologías crónicas.



Pregunta 6

¿Por qué se produce el acné? Señalar la correcta:

1. Por excesiva producción de sebo.
2. Es una cuestión hormonal, sobre todo de los andrógenos.
3. Se produce inflamación desde el principio.
4. La dieta influye en la aparición del acné.

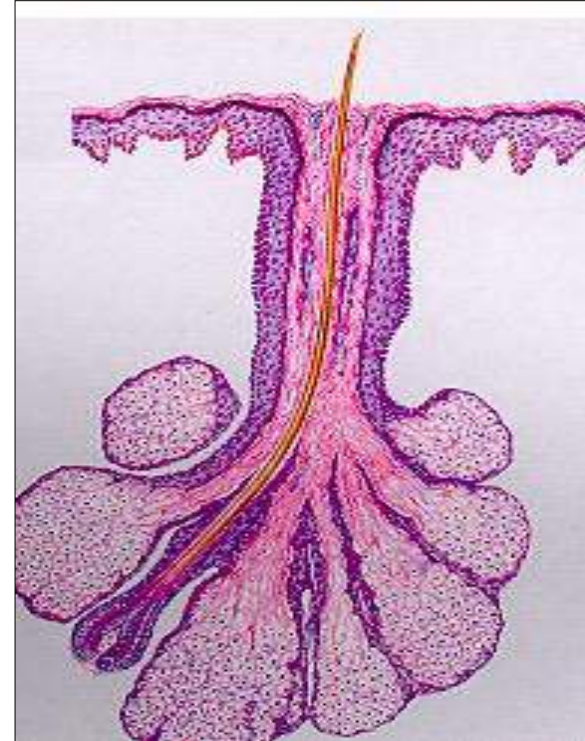
Acné. Etiopatogenia

- 👉 Desconocida.
- 👉 Multifactorial.
- 👉 Proceso patológica de la unidad pilosebácea.
- 👉 Inicio en el canal folicular y afectación glandular secundaria.

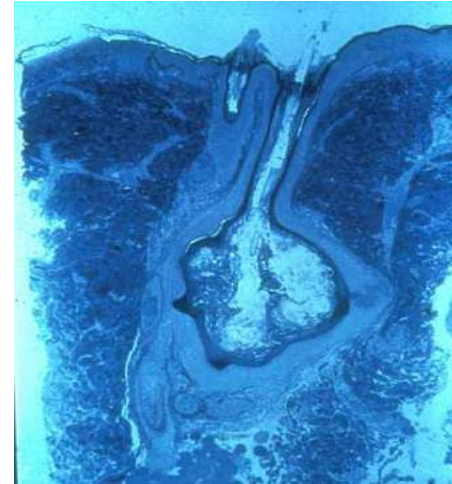
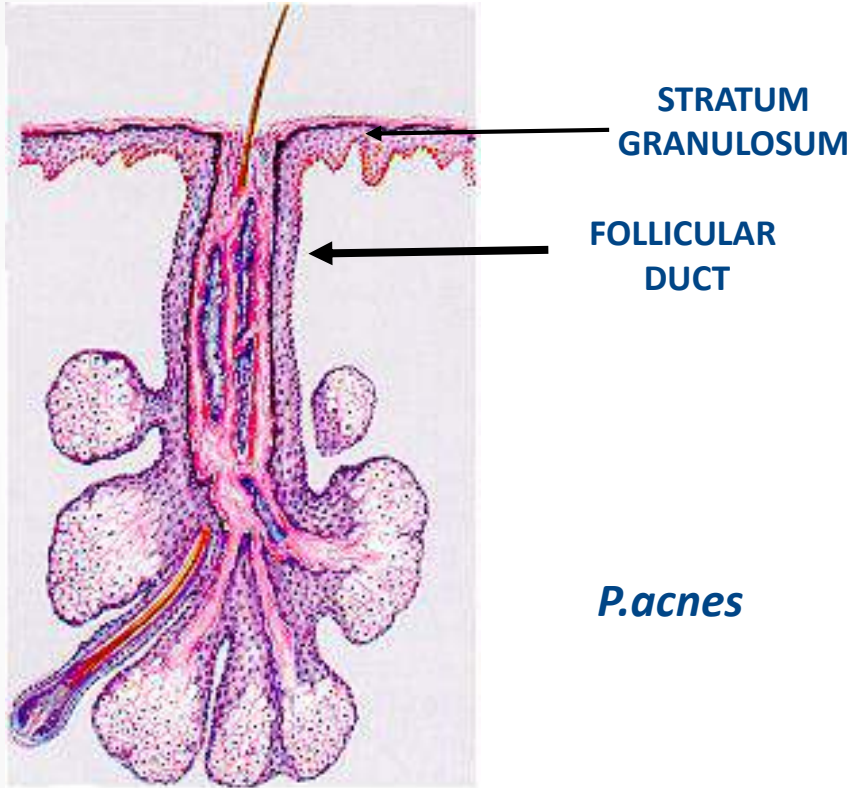
Acné. Fisiopatología

👩 Estímulo androgénico:

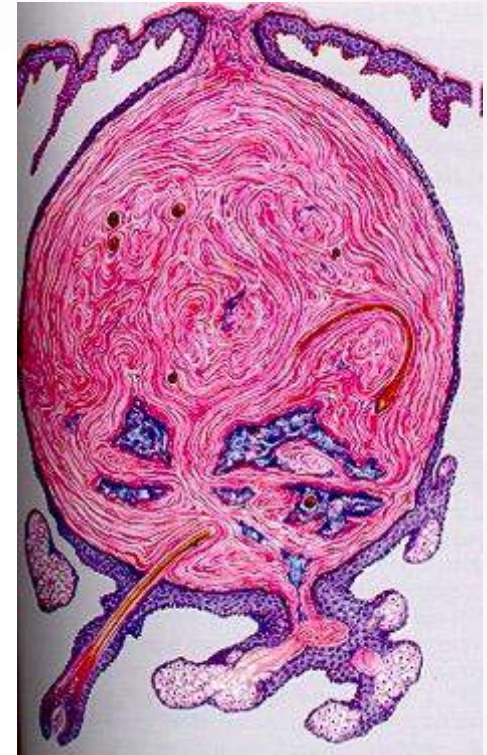
- ❖ Excesiva producción de sebo.
- ❖ Hiperqueratinización.
- ❖ Proliferación de P. acnés.
- ❖ Inflamación.



Hipercornificación ductal



Microcomedón



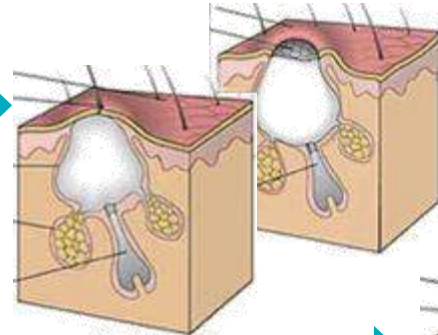
Comedón cerrado



Excesiva producción de sebo

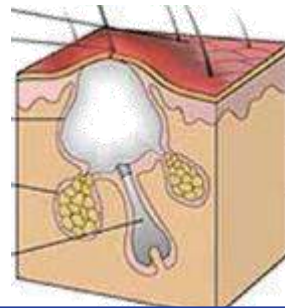
Hiperqueratinización

Microcomedón
Formación

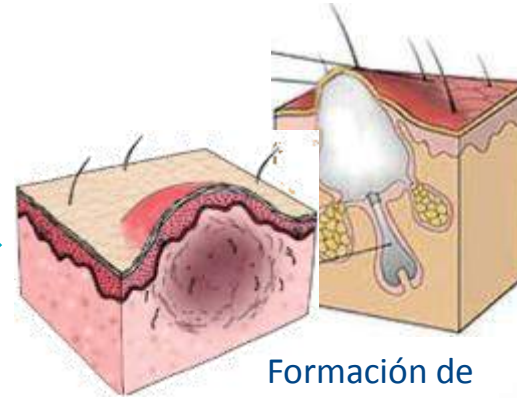


Formación de Comedones
cerrados y abiertos

Colonización *P. acnés*



Inflamación y
formación de pápulas



Formación de
pústulas y quistes

Cicatrices



4 factores claves en
acné

JEADV

Journal of the European Academy of Dermatology and Venereology
www.jeadv.com

Separata en español reproducida de
JEADV 2015; 29(S4): 3-11

Entendiendo el papel de la inmunidad innata y la inflamación en el acné: implicaciones para el tratamiento

B. Dreno, H. P. M. Gollnick, S. Kang, D. Thiboutot, V. Bettoli, V. Torres
y J. Leyden en nombre de la Alianza Global para Mejorar los Resultados en el Acné
(*Global Alliance to Improve Outcomes in Acne*)

¿Cuándo hay que tratar el acné ?

👨‍⚕️ Siempre.

👨‍⚕️ Siempre.

👨‍⚕️ Siempre.

👨‍⚕️ Siempre.



Tratamiento del acné: objetivos

- 👉 Regular la secreción sebácea.
- 👉 Evitar la obstrucción del folículo.
- 👉 Disminuir la población bacteriana.
- 👉 Eliminar la inflamación.
- 👉 Mejorar el aspecto estético.
- 👉 Bienestar psicológico.

Tratamiento del acné

- 👉 El tratamiento de elección del acné debe surgir del **acuerdo o «pacto terapéutico»** entre médico y paciente.
- 👉 Evaluación de la repercusión médica y psicológica, **ACTUALES Y FUTURAS**.

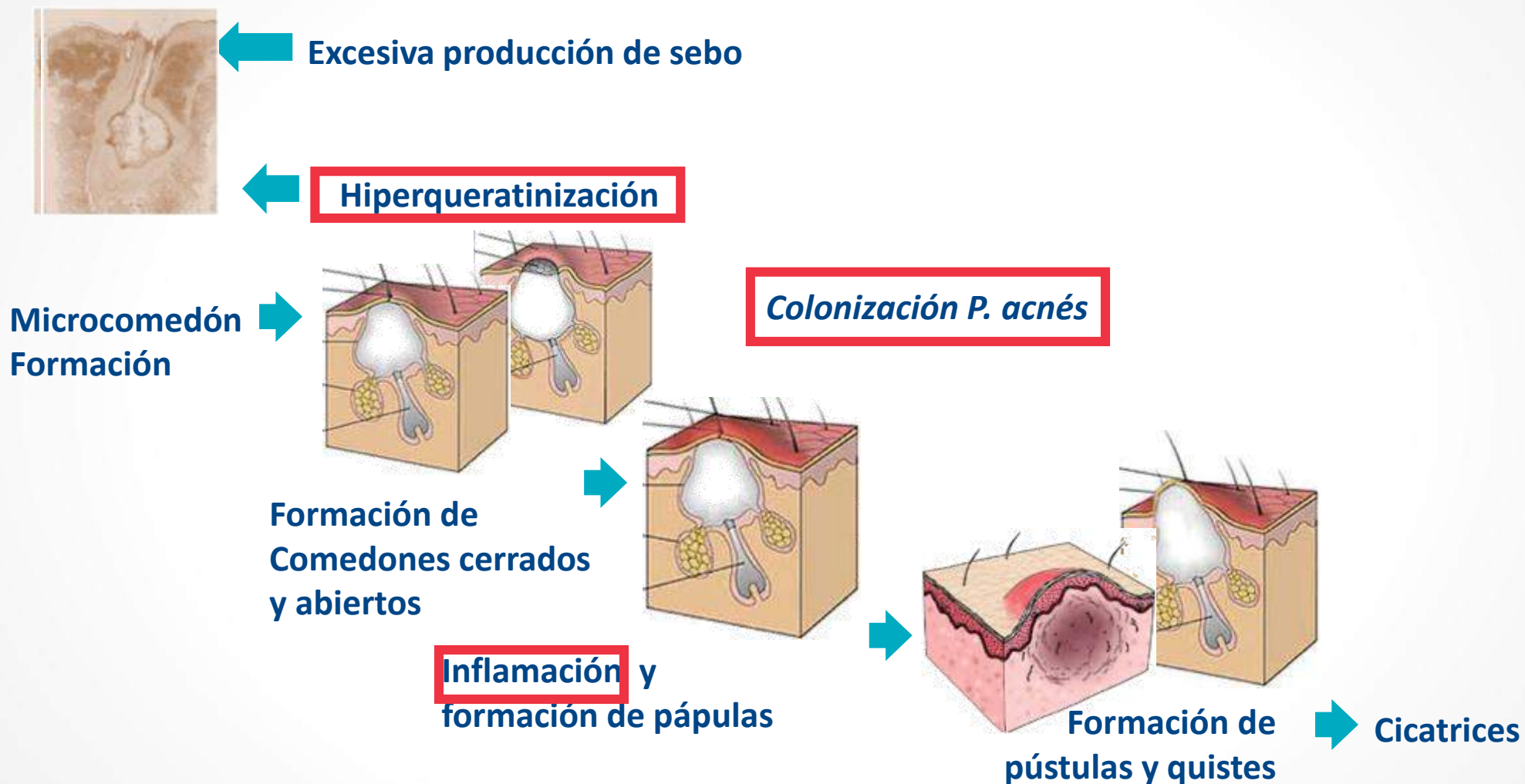


Estrategias generales de tratamiento

- 👉 Que el paciente entienda la terapia.
- 👉 Explicar medidas higiénicas y modo de utilización de los fármacos.
- 👉 Constancia.
- 👉 Paciencia hasta la mejoría.
- 👉 Avanzar posibles efectos adversos (irritación inicial por los tratamientos tópicos).



El tratamiento debe dirigirse a tantos factores patogénicos como sea posible



**Gollnik et al. Management of Acné. A Report From a Global Alliance to Improve Outcomes in Acne. JAAD 2003*

Caso clínico



Pregunta 7

¿Qué padecen Carmen y Daniel?

1. Acné inflamatorio.
2. Acné comedoniano.
3. Acné conglobata.
4. Acné medicamentoso.

Pregunta 8

¿Qué tratamiento pautarías inicialmente?

1. Isotretinoína oral.
2. Peróxido de benzoilo asociado a clindamicina.
3. Retinoides tópicos.
4. Antibiótico tópico.

...¿Y si no responden?

Una buena opción: combinación de peróxido de benzoilo y clindamicina asociado a doxiciclina oral.

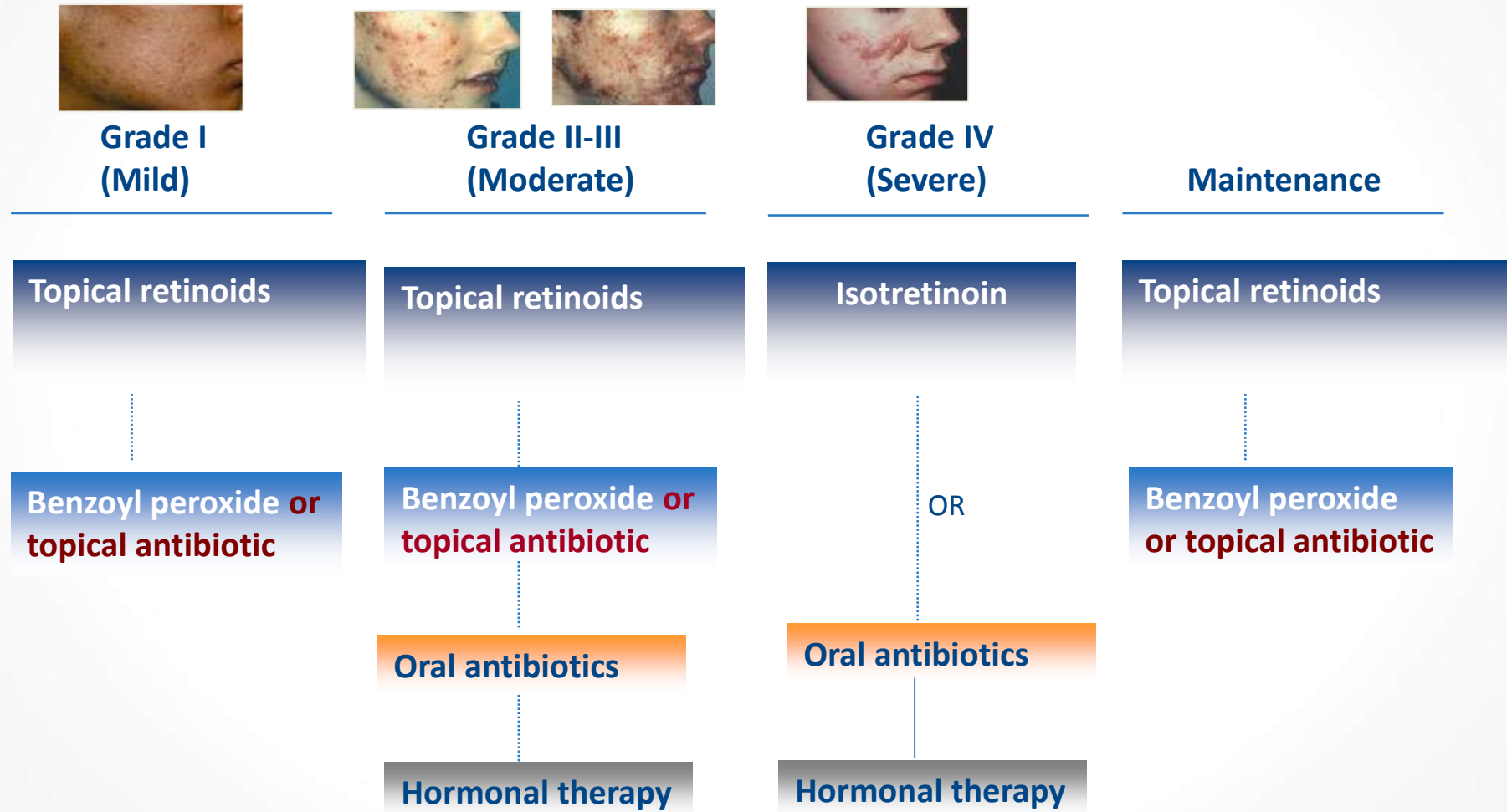
Isotretinoína oral.

Tratamiento del acné

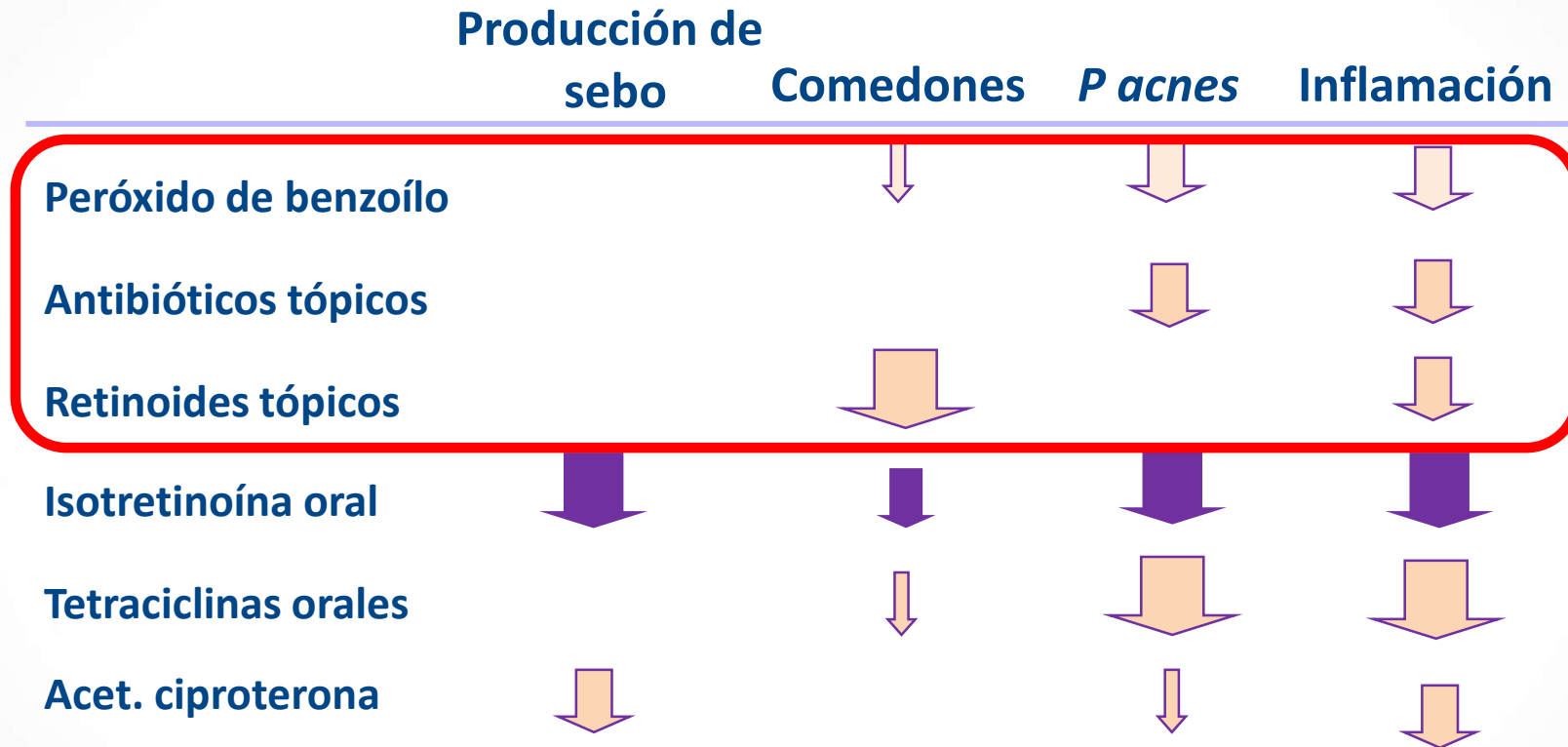
- 👉 Tratamiento tópico.
- 👉 Tratamiento sistémico.
 - ❖ Antibióticos.
 - ❖ Hormonal.
 - ❖ Retinoides: isotretinoína.



La terapia combinada es actualmente el tratamiento estándar para el acné leve a moderado



Supresión de:



Peróxido de benzoilo

- 👉 **Acción queratolítica, antibacteriana y sebostática.**
- 👉 Aplicación 1-2 veces /dia según tolerancia.
- 👉 No utilizar en concentraciones >5%.
- 👉 Seguro en embarazo.
- 👉 Efectos 2º:
 - ❖ Dermatitis de contacto (2%).
 - ❖ Quemazón al aplicarlo.
 - ❖ Blanqueado de ropa y cabello.

 **Asociado a clindamicina.**

 **Asociado a adapaleno.**

Dieta y acné

Dermato-Endocrinology 4:1, 20–32; January/February/March 2012; © 2012 Landes Bioscience

Dietary intervention in acne Attenuation of increased mTORC1 signaling promoted by Western diet

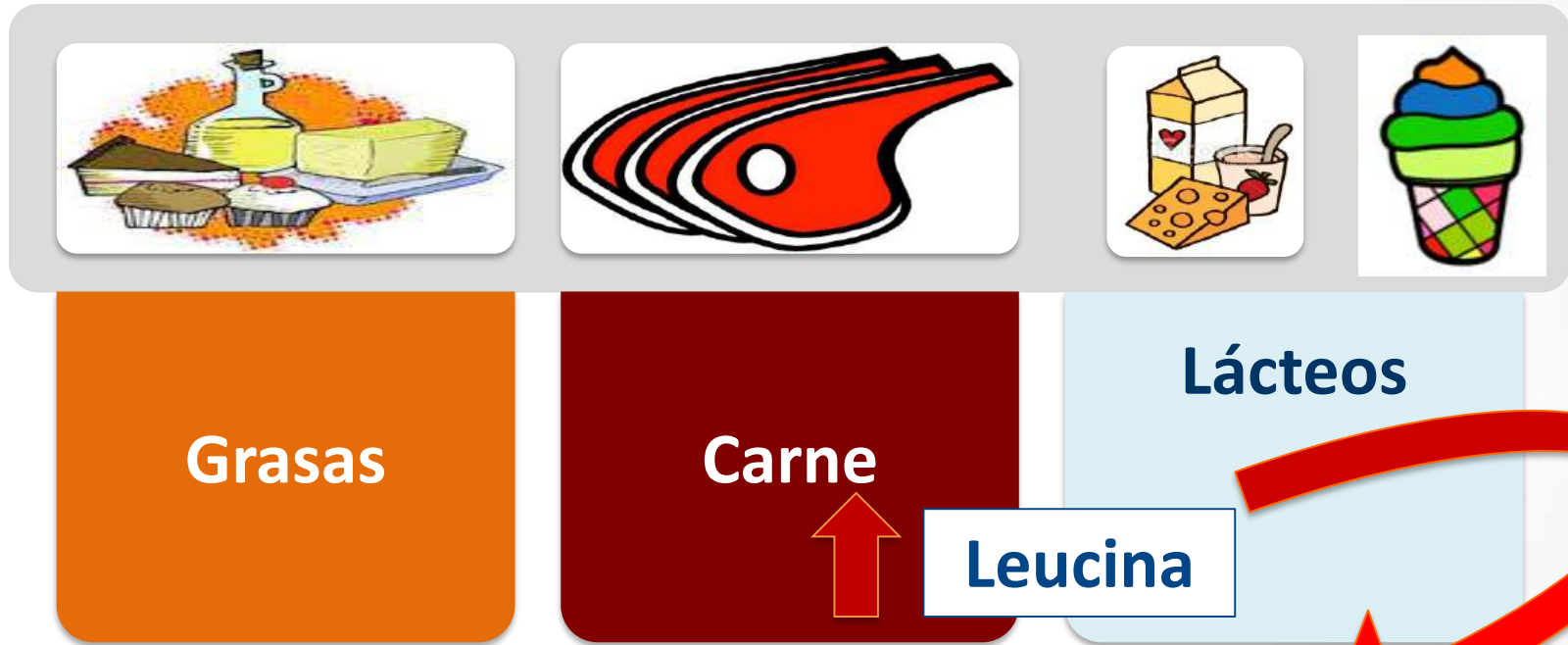
Bodo C. Melnik

Department of Dermatology, Environmental Medicine and Health Theory; University of Osnabrück; Osnabrück, Germany

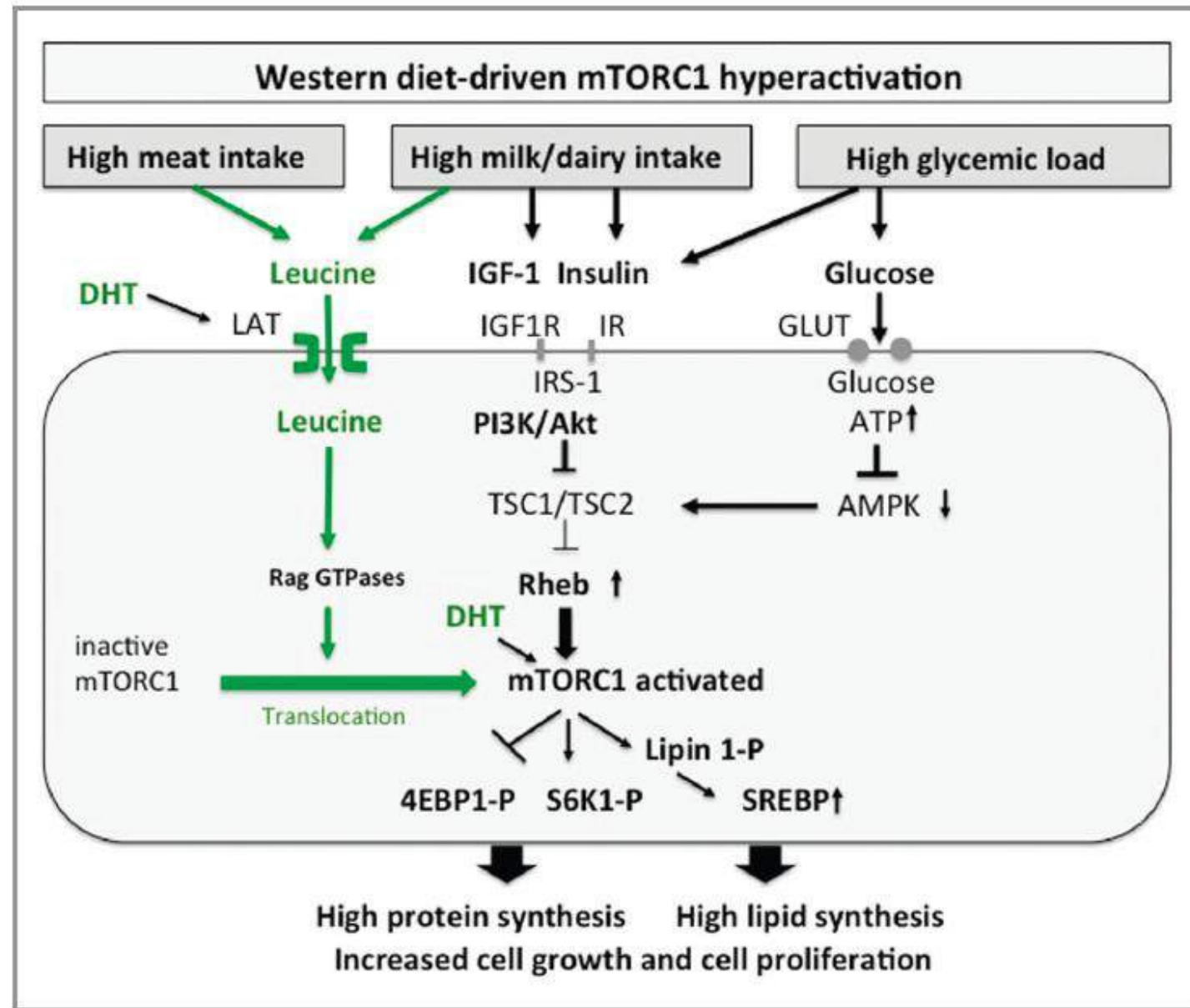
Keywords: acne, androgen, FoxO, IGF-1, insulin, leucine, mTORC1, nutrition, prevention, Western diet

Dieta occidental

- 👉 Gran aporte calórico.
- 👉 Alimentos con elevado índice glucémico.



Mantiene la activación de la vía: mammalian target of rapamycin complex 1 (mTORC1).



Epidemia del siglo 21 “mTORC1itis”

- 👉 Obesidad
- 👉 Diabetes tipo 2
- 👉 Cáncer
- 👉 Enfermedades neurodegenerativas

**Acné
pediátrico**

**Dieta rica en frutas y
verduras (Paleolítico)**
Frenar mTORC1

Novedades en infecciones



¿En cuánto tiempo resuelven las verrugas víricas?

Pediatric Dermatology, Vol. 32 No. 5 679-683, 2013

Children with Warts: A Retrospective Study in an Outpatient Setting

Anne M. Kowalska, B.A., Barbara M. Ralser, M.D., Haifei Bao, M.S., and Bernard A. Cohen, M.D.

Division of Pediatric Dermatology, Department of Pediatrics and Dermatology, School of Medicine, Johns Hopkins University, Baltimore, Maryland

Abstract

Background: The purpose is to investigate the demographics and course of common warts in children in an outpatient setting.

Methods: A retrospective medical chart review and telephone survey study were completed on an outpatient cohort of children (0-17 yrs) with a clinical diagnosis of warts at a single center, university-based pediatric dermatology practice. The main outcome measures included management, time to resolution, and associated factors of warts in children.

Results: Of the 254 patients we contacted, 214 agreed to participate in the survey. The most commonly involved sites were the hands and the head and neck area. Most children received some form of therapy, but it is unclear that any form of treatment altered the course. However, children with a medical history of childhood infections or more than one anatomic site had significantly greater risk of having a longer time to resolution.

Conclusions: Warts resolved in 60% of children by 2 years and in 80% within 4 years, regardless of treatment. With the exception of a history of childhood infections and having more than one anatomic site, time to resolution was not altered by wart or patient characteristics. This counseling without aggressive destructive treatment is a reasonable approach to managing warts in most children. Our findings will provide guidance in the process of shared decision making with parents and children.



65% en 2 años, 80% en 4 años

Is Gianotti–Crosti Syndrome Associated with Atopy? A Case–Control Study and a Postulation on the Intrinsic Host Factors in Gianotti–Crosti Syndrome

Antonio Chuh, M.D.,* Vijay Zawar, M.D., D.N.B., D.V.D.,† Albert Lee, M.D.,* and Gabriel Sciallis, M.D.‡

**Jockey Club School of Public Health and Primary Care, Chinese University of Hong Kong and Prince of Wales Hospital, Shatin, Hong Kong, †Skin Diseases Center, Nashik, India, ‡Department of Dermatology, College of Medicine, Mayo Clinic, Rochester, Minnesota*

Abstract

Objectives: To investigate whether Gianotti–Crosti syndrome (GCS) in children is associated with atopy.

Methods: The setting was two outpatient clinic. Diagnoses of asthma and atopic dermatitis (AD) were made according to internationally accepted diagnostic criteria. Allergic rhinitis, atopic urticaria, and allergic conjunctivitis were diagnosed clinically. Participants were children with GCS diagnosed over the previous 5 years. For any child with GCS, we extracted the record of the subsequent age and sex pair-matched child seen for problems unrelated to the skin as controls.

Results: We retrieved the records of 37 pairs of study and control subjects; 28 (76%) children with GCS and 9 (24%) controls had AD (risk ratio [RR] = 3.11 [95% confidence interval (CI) 1.73, 5.73]), 31 (84%) children with GCS and 19 (51%) controls had at least one atopic condition (RR = 1.63 [95% CI 1.13, 2.18]) and 11 (30%) children with GCS and 2 (5%) controls had at least three atopic conditions (RR = 5.50 [95% CI 1.29, 35.35]).

Conclusion: GCS is significantly associated with AD and the presence of atopic conditions.



Mycoplasma-induced rash and mucositis (MIRM)

👉 **NUEVO TÉRMINO** para diferenciarlo del EEM asociado a VHS y del SJS asociado a fármacos (95 artículos, 202 casos).

👉 Rasgos distintivos:

- ❖ Jóvenes (11+/-8.8 años).
- ❖ Fiebre, malestar general, tos precediendo al resto una semana antes.
- ❖ **Mucositis muy prominente** (oral (94%) > ocular (82%) > genital (63%)).
- ❖ **Lesiones cutáneas ausentes o escasas.**
- ❖ Pronóstico excelente.

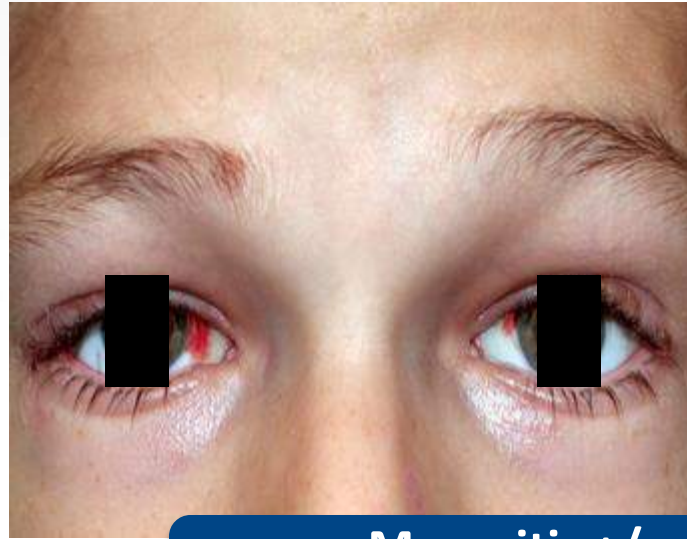
👉 Tratamiento:

- ❖ Corticoides sistémicos +/- IGIV.

Canavan TN. JAAD 2015

Ahluwalia J. Pediatr Dermatol 2014

Mycoplasma-induced rash and mucositis (MIRM)



Mucositis +/- escasas lesiones cutáneas
vesiculoampollosas o dianiformes acrales



Cavana T. JAAD 2015

Enfermedad mano-pie-boca atípica

Lesiones vesiculocostrosas generalizadas

- ❖ Pueden agruparse en placas.
- ❖ Pronóstico bueno.
- ❖ Diagnóstico diferencial: varicela, eccema herpeticum.

“Pistas” clínicas.

- ❖ No afectación cuero cabelludo.
- ❖ Lesiones en ≥ 2 “zonas bastión”.
- ❖ Rash perioral (coxsackie A6).



Producida por coxsackie a6 y a16

Hubiche T. *Pediatr Infect J Dis* 2014



- ❖ Niños > 5 años.
- ❖ Acral.

Lesiones
petequiales o
purpúricas

- ❖ Papulovesicular.
- ❖ Erosiones prominentes.

Lesiones
vesiculosas,
ampollosas y
erosivas
generalizadas



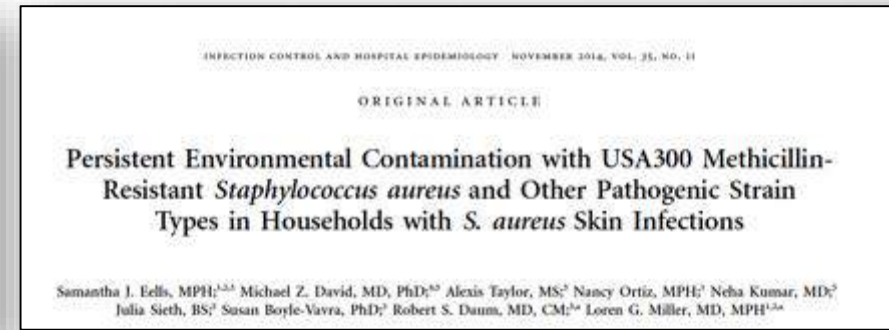
- ❖ Menores de un año.
- ❖ Lesiones periorales, tronco, extremidades.
- ❖ Menos lesiones intraorales.

Eccema
coxsackium

- ❖ Dermatitis atópica.
- ❖ Quemadura solar, dermatitis del pañal, tiña pedís.
- ❖ DD: eccema herpeticum.

Lesiones
Giannotti-
Crosti like





Importancia de las superficies/enseres domésticos y mascotas como reservorios de SARM



- Sábanas
- Teléfonos y mandos a distancia
- Toallas de baño
- Pomos de puertas
- Grifos
- Juguete "favorito"
- Mascotas (perros, gatos)

El estafilococo podría persistir hasta 3 meses

Es necesario definir métodos para su erradicación, sobre todo en infecciones recurrentes dentro del ámbito familiar



Epidemiology of Pediatric Herpes Zoster After Varicella Infection: A Population-Based Study

Su-Ying Wen, MD^{a,b}, Wen-Liang Liu, PhD^{c,d}

NIÑOS CON VARICELA PREVIA

- ❖ Edad media, 8.4 años.
- ❖ Tiempo al zoster, 4.12 años.
- ❖ Si varicela <2 años, más riesgo de herpes zoster y en menos tiempo.
- ❖ Si terapia antiviral, más riesgo también de herpes zoster.

NIÑOS VACUNADOS

- ❖ Edad media, 2.51 años (1.36-4.78).
- ❖ ¿Diferencias? Lesiones menos dolorosas, menos vesículas, menor extensión.



Incidence menor de herpes zoster en los vacunados que en los niños que habían tenido varicela

Su-Ying W. Pediatrics 2015

CASE REPORTS

Pediatric Dermatology Vol. 33 No. 2 209–212, 2016

Congenital Chikungunya—A Cause of Neonatal Hyperpigmentation

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Varsha Phadke, M.D.,† Priyashree Mukherjee, M.D.,† Swati Gupta, M.D.,†
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Abstract: A 12-day-old neonate presented with ill-defined dark pigmentation over the centrofacial area with flagellate pigmentation on the trunk and patchy pigmentation on the extremities. The mother had a history of fever starting a week before delivery and continuing for 3 days in the postpartum period. Together these led to consideration of a possible diagnosis of congenital chikungunya, which was confirmed according to the immunoglobulin M antibodies to chikungunya in the mother and child. The rare occurrence of cutaneous pigmentation was the only clue to the retrospective diagnosis of neonatal chikungunya. Chikungunya is an emerging viral disease that can be transmitted maternally during pregnancy and in the peripartum period. It can be added to the list of viral infections that can lead to fetal demise or, when present during labor and delivery, can cause neonatal disease with cutaneous signs.



Figure 3. (A) Hyperpigmentation on the dorsum of the hand. (B) Patchy hyperpigmentation over the ankle. (C) Ill-defined hyperpigmentation over the groin. (D) Accentuation of pigmentation over the scrotum and penile shaft.



Caso clínico

- ☞ Sofía, 6 meses.
- ☞ Fiebre, tos, mocos.
- ☞ Exantema a las 48 horas de iniciar amoxicilina.



Pregunta 9

¿Qué cuadro presenta Sofía?

1. Es una toxicodermia por amoxicilina.
2. Es un eritema exudativo multiforme (veo dianas).
3. Es una urticaria aguda.
4. Es una exantema vírico.

Pregunta 10

¿Qué pregunta es la clave para llegar al diagnóstico?

1. ¿Cuándo aparecieron las lesiones?
2. ¿Cuánto le duran?
3. ¿Le pican?
4. ¿Le duelen?

Urticaria agua

- ☞ Lesiones evanescentes.
- ☞ Pruriginosas.
- ☞ Morfología anular.
- ☞ Descartar síntomas generales.
- ☞ Causa más frecuente: infección viral.
- ☞ Tratamiento antihistamínicos.





No es una reacción
alérgica al antibiótico.
La Historia Clínica es
fundamental.



Distinguirla del EEM



Urticaria anular
Urticaria postinfecciosa aguda
Urticaria multiforme



¿Cuándo hablamos de urticaria crónica?

👨‍⚕️ Más de 4 semanas.

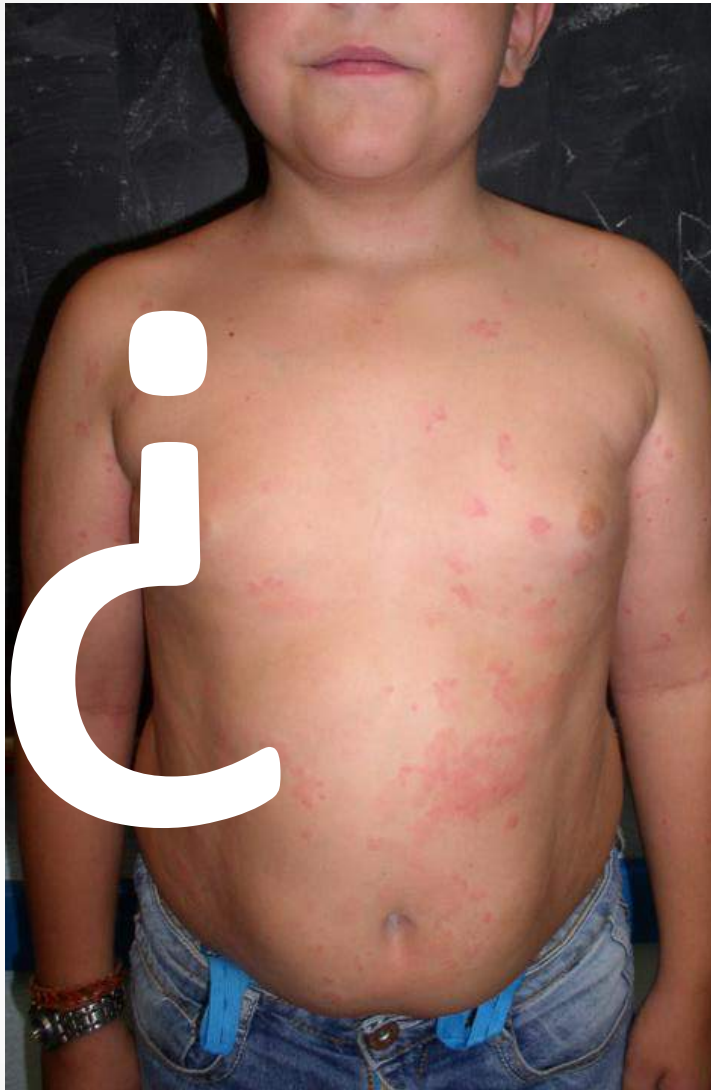
👨‍⚕️ Idiopática en el 95%.

👨‍⚕️ Urticaria neonatal.

👨‍⚕️ Cuidado en síndromes autoinflamatorios.

👨‍⚕️ Más de 6 semanas.

A veces la realidad supera a la ficción









Urticaria crónica

- 👉 Identificar la causa.
- 👉 Antihistamínicos.
 - ❖ Bilaxtina.
 - ❖ Polaramine 4 – 6 mg / Atarax 25 mg c/8 h.
 - ❖ Embarazadas: Polaramine.
- 👉 Corticoides: Urbason / Celestone Cronodose IM.
 - ❖ Angioedema.
 - ❖ Muy extensa.
 - ❖ Mal control con antihistamínicos.