



AARS **HOT TOPICS** MEMBER NEWSLETTER

American Acne and Rosacea Society
201 Claremont Avenue • Montclair, NJ 07042
(888) 744-DERM (3376) • info@aarsmember.org
www.acneandrosacea.org



Like Our YouTube Page

We encourage you to invite your colleagues and patients to get active in the American Acne & Rosacea Society! Visit www.acneandrosacea.org to become member and donate now on www.acneandrosacea.org/ donate to continue to see a change in acne and rosacea.

TABLE OF CONTENTS

Industry News

- [An unbalanced microbiome on the face may be key to acne development 2](#)
- [Rosacea Awareness Month brings focus to five developments in rosacea..... 2](#)
- [April is Rosacea Awareness Month 3](#)
- [Allergan, Paratek announce positive results for sarecycline as an acne therapy 3](#)

New Medical Research

- [Bactericidal activity and post-antibiotic effect of ozenoxacin against 4](#)
- [A randomized, double-blind, placebo-controlled trial to determine the efficacy 4](#)
- [Dermasence refining gel modulates pathogenetic factors of rosacea in vitro 5](#)
- [A peel-off facial mask comprising myoinositol and trehalose-loaded liposomes..... 5](#)

Clinical Reviews

- [The role of fillers in the management of acne scars 6](#)
- [The Efficacy and Safety of the Fractional Radiofrequency Technique 6](#)
- [Demodex Mite Density Determinations by Standardized Skin Surface Biopsy 6](#)
- [Oral Contraceptives for Acne Treatment: Prescribing Practices of US 7](#)
- [Oral Contraceptives for Acne Treatment: US Dermatologists' Knowledge 7](#)
- [Clindamycin Phosphate–Tretinoin Combination Gel Revisited: Status Report 8](#)
- [Lasers in the treatment of acne 8](#)
- [Autoinflammatory syndromes associated with hidradenitis suppurativa 9](#)
- [Isotretinoin treatment for acne and risk of depression: A systematic 9](#)
- [Incidence of hidradenitis suppurativa in the United States: 9](#)
- [Hidradenitis Suppurativa Scoring Systems: Can We Choose Just One?..... 10](#)
- [A Systematic Review on Oral Isotretinoin Therapy and Clinically Observable..... 10](#)

Patient Communication / Counseling

- [The role of wide local excision for the treatment of severe hidradenitis 11](#)
- [Hidradenitis suppurativa gains increasing interest on World Wide Web: 11](#)
- [Acne affects self-confidence of many teenagers, survey finds 12](#)
- [Acne in Men 12](#)

Industry News

An unbalanced microbiome on the face may be key to acne development. 06 April 2017. Microbiology Society. <https://www.microbiologysociety.org/news/press-releases/an-unbalanced-microbiome-on-the-face-may-be-key-to-acne-development.html>

Today at the Microbiology Society's Annual Conference, researchers will show that the overall balance of the bacteria on a person's skin, rather than the presence or absence of a particular bacterial strain, appears to be an important factor for acne development and skin health. Researchers, led by Dr Huiying Li, an associate professor of molecular and medical pharmacology at the David Geffen School of Medicine at UCLA, used over-the-counter pore cleansing strips to obtain skin follicle samples from 72 individuals: 38 with acne and 34 who didn't have the disease. The team then used a technique called DNA shotgun sequencing analysis to identify and compare the make-up of the skin microbiome of the two groups, and further validated the findings in an additional 10 individuals. The researchers were able to detect differences in skin bacteria composition, pinpointing fine genetic differences between the *P. acnes* strains of the two clinical groups. In the healthy group, the bacterial community was enriched with genes related to bacterial metabolism, which are thought to be important in preventing harmful bacteria from colonising the skin. In contrast, the acne group contained higher levels of virulence-associated genes, including those relating to the production and transport of pro-inflammatory compounds such as bacterial toxins that are potentially harmful to the skin. Based on the profiles of these genomic elements, the team was able to predict the health status of the individuals with high accuracy. Dr Li said of the research: "This study suggests that the make-up of the bacteria in the follicles can reflect, as well as influence, the skin condition in acne or healthy skin". This study provides new insights into the microbial mechanisms behind acne development and suggests that targeted treatments to modulate the skin microbiota and maintain a healthy bacterial balance may be preferable over antibiotic usage, which can unselectively kill both harmful and beneficial skin bacteria. These treatments could include probiotic supplementation or phage therapy that selectively targets specific bacterial strains.

Rosacea Awareness Month brings focus to five developments in rosacea. April 6, 2017. Heallo Dermatology News. <http://www.heallo.com/dermatology/dermatitis/news/online/%7B5f77a329-d44a-4bc7-be90-282ff24ee9d4%7D/rosacea-awareness-month-brings-focus-to-five-developments-in-rosacea>

April has been designated Rosacea Awareness Month by organizations including the National Rosacea Society and the Acne and Rosacea Society of Canada. Developments reported on Heallo.com/Dermatology include research presented at this year's American Academy of Dermatology Annual meeting that microneedling with tranexamic acid solution was an effective treatment for rosacea and study results finding that rosacea may be tied to increased risk for inflammatory bowel disease: **Microneedling with tranexamic acid solution effectively treated rosacea:** ORLANDO, Fla. — Microneedling with tranexamic acid solution was an effective treatment for women with erythematotelangiectatic rosacea, according to late-breaking research presented at the American Academy of Dermatology Annual Meeting. Fotini Bageorgou, MD, reported on a study of 20 women, aged between 27 and 65 years, with erythematotelangiectatic rosacea. **Rosacea may be tied to increased risk for inflammatory bowel disease:** There was an increased risk for inflammatory bowel disease in patients with rosacea, according to study results published in the Journal of the American Academy of Dermatology. Researchers in Taiwan used the Taiwanese National Health Insurance Research Database to identify 89,356 patients with rosacea and 178,712 matched patients without rosacea (reference cohort) between 1997 and 2013 for analysis. **Radiofrequency effectively treats rosacea when compared with pulsed dye laser:** Radiofrequency therapy was as effective as

pulsed dye laser in treating rosacea, particularly in patients with papulopustular rosacea, according to published study results. Researchers studied 30 patients with rosacea (19 women; average age, 43.4 years), including 20 patients with erythematotelangiectatic rosacea (ETR) and 10 patients with papulopustular rosacea (PPR). **Women with rosacea at higher risk for migraine:** Women with rosacea had a significantly higher risk for incident migraine compared with the general Danish population, according to study results recently published in the Journal of the American Academy of Dermatology. Alexander Egeberg, MD, PhD, of the department of dermatology and allergy, Herlev and Gentofte Hospital, University of Copenhagen, Denmark, and colleagues used nationwide registers of all Danish citizens aged 18 years or older to study the prevalence of and risk for new-onset migraine in patients with rosacea. **VIDEO: Soolantra vs. metronidazole in relapse of rosacea:** WASHINGTON — In a video perspective on the eve of the American Academy of Dermatology Annual Meeting 2016, Hillary Baldwin, MD, discusses a two-part study comparing Soolantra (ivermectin, Galderma) cream 1% with metronidazole 0.75% cream in treating patients with papulopustular rosacea. Baldwin, director of the Acne Research and Treatment Center in Morristown, New Jersey, discussed the second part of the study, which looked at relapse rates in patients over 1 year.

April is Rosacea Awareness Month. April 3, 2017. Healio Dermatology News.

<http://www.healio.com/dermatology/dermatitis/news/online/%7B7c402475-1037-49de-a033-114e5e0e72b7%7D/april-is-rosacea-awareness-month>

April has been designated Rosacea Awareness Month in the United States and Canada to educate the public about the widespread facial disorder. An estimated 16 million Americans are affected by the disease, according to the National Rosacea Society. The goal of Rosacea Awareness Month is to spread awareness about the disease that is estimated to affect more than 16 million Americans, so that more people who may have rosacea seek medical help before it gets worse, and to find greater public acceptance for those people whose lives are affected by the disease, according to an announcement on the National Rosacea Society's website. "The earliest signs of rosacea are often overlooked because people assume they are temporary and will go away," John Wolf, MD, chairman of dermatology at Baylor College of Medicine, stated on the website. "Unfortunately, without medical treatment the effects of rosacea often persist and become increasingly severe. More than 3 million Canadians also have the skin disorder, according to a release from the Acne and Rosacea Society of Canada. "Many Canadians are not aware of rosacea and think a red face is due to heavy drinking, sunburn or other undesirable reasons," Shannon Humphrey, MD, a Vancouver, British Columbia, dermatologist and spokesperson for the Acne and Rosacea Society of Canada, stated in the release. A survey by the Canadian society showed that seven in 10 Canadians are unable to recognize rosacea, according to the release. The Canadian organization shared "four most embarrassing myths about rosacea," which includes the red face is caused by drinking too much alcohol or due to a sunburn, the person with rosacea has adult acne, and a person with rosacea is easily flustered. The redness is due to more prominent facial blood vessels and increased blood flow, with the causes of rosacea not fully known. Rosacea is an inflammatory and immunologic condition that has genetic roots for many but can be triggered by alcohol use, according to the Canadian society release. Reference: www.rosaceahelp.ca ; www.rosacea.org

Allergan, Paratek announce positive results for sarecycline as an acne therapy. By Rob Volansky. March 27, 2017. Healio Dermatology News. <http://www.healio.com/dermatology/acne/news/online/%7B0fbc199b-4932-4672-a5a8-797de87ff090%7D/allergan-paratek-announce-positive-results-for-sarecycline-as-an-acne-therapy>

Allergan and Paratek Pharmaceuticals announced today that two phase 3 trials of sarecycline yielded encouraging 12-week results for the treatment of moderate-to-severe acne, according to a press release. The once-daily, oral,

narrow-spectrum tetracycline-deprived antibiotic has anti-inflammatory properties. Researchers on the two studies aimed to replicate previous randomized, multicenter, double-blind, placebo-controlled studies that evaluated a 1.5 mg/kg dose of the drug for safety and efficacy outcomes. Eligible participants were treated with 60 mg, 100 mg, or 150 mg of the drug daily or placebo once daily. The study drug was associated with a significant improvement over placebo with regard to efficacy outcomes ($P < .004$). Nausea occurred in less than 4% of the cohort, while nasopharyngitis and headache occurred in fewer patients than that. Less than 2% of the cohort discontinued due to adverse events.

New Medical News

Bactericidal activity and post-antibiotic effect of ozenoxacin against *Propionibacterium acnes*. Kanayama S, Okamoto K, Ikeda F, et al. *J Infect Chemother.* 2017 Apr 4. pii: S1341-321X(17)30051-X. doi: 10.1016/j.jiac.2017.03.004. [Epub ahead of print] <https://www.ncbi.nlm.nih.gov/pubmed/28389164>

Ozenoxacin, a novel non-fluorinated topical quinolone, is used for the treatment of acne vulgaris in Japan. We investigated bactericidal activity and post-antibiotic effect (PAE) of ozenoxacin against *Propionibacterium acnes*, a major causative bacterium of acne vulgaris. The minimum inhibitory concentrations (MICs) of ozenoxacin against 3 levofloxacin-susceptible strains (MIC of levofloxacin; ≤ 4 $\mu\text{g/mL}$) and 3 levofloxacin-resistant strains (MIC of levofloxacin; ≥ 8 $\mu\text{g/mL}$) ranged from 0.03 to 0.06 $\mu\text{g/mL}$ and from 0.25 to 0.5 $\mu\text{g/mL}$, respectively. These MICs of ozenoxacin were almost the same or lower than nadifloxacin and clindamycin. The minimum bactericidal concentrations (MBCs) of ozenoxacin against the levofloxacin-susceptible and -resistant strains were from 0.06 to 8 $\mu\text{g/mL}$ and from 0.5 to 4 $\mu\text{g/mL}$, respectively. These MBCs were lower than those of nadifloxacin and clindamycin. In time-kill assay, ozenoxacin at 1/4, 1 and 4 times the respective MIC against both levofloxacin-susceptible and -resistant strains showed a concentration-dependent bactericidal activity. Ozenoxacin at 4 times the MICs against the levofloxacin-susceptible strains showed more potent and more rapid onset of bactericidal activity compared to nadifloxacin and clindamycin at 4 times the respective MICs. The PAEs of ozenoxacin at 4 times the MICs against the levofloxacin-susceptible strains were from 3.3 to 17.1 h, which were almost the same or longer than nadifloxacin and clindamycin. In contrast, the PAEs were hardly induced by any antimicrobial agents against the levofloxacin-resistant strains. The present findings suggest that ozenoxacin has a potent bactericidal activity against both levofloxacin-susceptible and -resistant *P. acnes*, and a long-lasting PAE against levofloxacin-susceptible *P. acnes*.

A randomized, double-blind, placebo-controlled trial to determine the efficacy and safety of lactoferrin with vitamin E and zinc as an oral therapy for mild to moderate acne vulgaris. Chan H, Chan G, Santos J, Dee K, Co JK. *Int J Dermatol.* 2017 Mar 30. doi: 10.1111/ijd.13607. [Epub ahead of print] <https://www.ncbi.nlm.nih.gov/pubmed/28369875>

Lactoferrin is an iron-binding milk-derived protein that has shown antibacterial and anti-inflammatory effects in vitro and in vivo. The objective of this study was to determine the efficacy and safety of lactoferrin, combined with vitamin E and zinc, for mild to moderate acne vulgaris. In this randomized, double-blind, placebo-controlled trial, 168 subjects aged 13-40 years old were randomly assigned to take either a capsule formulation containing lactoferrin with vitamin E and zinc or placebo twice a day for 3 months. The primary outcome measure was a reduction in the number of acne lesions compared to placebo. A total of 164 subjects completed the study per protocol. The lactoferrin group ($n = 82$) showed a significant median percent reduction in total lesions as early as 2 weeks (14.5%,

P = 0.0120), with the maximum reduction occurring at week 10 (28.5%, P < 0.0001) compared to placebo group (n = 82). Maximum reduction in comedones (32.5%, P < 0.0001) and inflammatory lesions (44%, P < 0.0001) was also seen at week 10 compared to placebo. Sebum scores were improved by week 12. No adverse events were observed during the trial. A twice daily regimen of lactoferrin with vitamin E and zinc significantly reduced acne lesions in people with mild to moderate acne vulgaris.

Dermasence refining gel modulates pathogenetic factors of rosacea in vitro. Borelli C, Becker B, Thude S, Fehrenbacher B, Isermann D. *J Cosmet Dermatol.* 2017 Mar 27. doi: 10.1111/jocd.12323. [Epub ahead of print] <https://www.ncbi.nlm.nih.gov/pubmed/28349651>

BACKGROUND: Over the counter cosmetics sold for local treatment of slight to moderate rosacea often state the claim of actively modulating rosacea pathogenesis. Factors involved in the pathogenesis of this common yet complex skin disorder include kallikrein-related peptidase 5 (KLK5), LL-37, as well as protease-activated receptor 2 (PAR2) and vascular endothelial growth factor (VEGF). **OBJECTIVE:** The objective was to prove the modulating effect of the cosmetic skin care agent Dermasence Refining Gel (DRG) on factors involved in rosacea pathogenesis. **METHODS:** We analyzed the effect of DRG on the expression of KLK5, LL-37, PAR2, and VEGF in an in vitro skin model of human reconstituted epidermis. **RESULTS:** The expression of CAMP (LL-37 gene, fold change -4.19 [\pm 0.11]), VEGFA (fold change -2.55 [\pm 0.12]) and PAR2 (-1.33 [\pm 0.12]) was reduced, KLK5 expression increased (fold change 2.06 (\pm 0.08)) after 18 h of treatment with DRG in comparison to treatment with the matrix gel only. The reduction in CAMP expression was significant (P<.01). The protein expression of all four inflammatory markers was markedly reduced after 18 hours of DRG treatment in comparison to baseline (0 hour), by measure of fluorescence intensity. **CONCLUSION:** We show evidence explaining the anti-inflammatory effect of Dermasence Refining Gel in rosacea pathogenesis in vitro. The adjunctive use of DRG in mild to moderate rosacea as a topical cosmetic seems medically reasonable.

A peel-off facial mask comprising myoinositol and trehalose-loaded liposomes improves adult female acne by reducing local hyperandrogenism and activating autophagy. Fabbrocini G, Capasso C, Donnarumma M, et al. *J Cosmet Dermatol.* Epub 25 March 2017. DOI: 10.1111/jocd.12340 <http://onlinelibrary.wiley.com/doi/10.1111/jocd.12340/abstract>

Background: Hyperandrogenism and reduced skin autophagy have been implicated in the pathogenesis of adult female acne (AFA). Here, we tested whether a ready-to-use peel-off facial mask containing myoinositol (an androgen inhibitor) and trehalose-loaded liposomes (as activators of cutaneous autophagy) applied overnight every other day for 60 days can improve AFA. We also sought to investigate the molecular mechanisms underlying the clinical effects. **Objectives:** We conducted an uncontrolled, open-label clinical study in 40 cases of AFA to investigate the effect of the facial mask on lesion count, sebum production (measured with the Sebutape® technique), and Global Acne Grading System (GAGS) scale. We also investigated the changes from baseline to the end of treatment in androgen and beclin-1 levels (as a marker of autophagy) in skin biopsy supernatants. **Methods:** Forty Caucasian patients with AFA were enrolled. Changes in clinical and molecular endpoints before and after treatment were investigated. **Results:** The mean counts of comedones, papules, pustules, and nodular lesions decreased significantly (all P<.001). The mean Sebutape® score was reduced from 3.4 \pm 0.6 to 1.8 \pm 0.2 (P<.001), whereas the mean GAGS scale score decreased from 16.8 \pm 5.3 at baseline to 9.8 \pm 4.6 after treatment (P<.001). A significant decrease in testosterone and dehydroepiandrosterone sulfate in skin biopsy supernatants was observed, whereas beclin-1 levels increased significantly (P<.001). **Conclusion:** A ready-to-use peel-off facial mask containing

myoinositol and trehalose-loaded liposomes improved the cosmetic appearance of AFA by reducing cutaneous androgen content and promoting skin autophagy.

Clinical Reviews

The role of fillers in the management of acne scars. Forbat E, Ali FR, Al-Niaimi F. Clin Exp Dermatol. 2017 Apr 10. doi: 10.1111/ced.13058. [Epub ahead of print] <https://www.ncbi.nlm.nih.gov/pubmed/28397293>

Acne scars are present in 95% of patients with acne, and can cause profound psychosocial morbidity. Fillers are commonly used for facial soft tissue augmentation, and there is increasing interest in their use for the treatment of acne scars, particularly for the atrophic subtype. We review the evidence for the use of temporary, semi-permanent and permanent fillers for acne scars. The use of permanent methylmethacrylate fillers for acne scarring is supported by a randomized controlled trial, and is approved by the United States Food and Drug Administration. There is initial evidence supporting the use of poly-L-lactic acid and hyaluronic acid fillers, but evidence is still lacking about the use of polyacrylamide and polyalkylimide fillers.

The Efficacy and Safety of the Fractional Radiofrequency Technique for the Treatment of Atrophic Acne Scar in Asians: a Meta-Analysis. Dai R, Xie H, Hua W, Li XH, Li BD. J Cosmet Laser Ther. 2017 Apr 7. doi: 10.1080/14764172.2017.1314507. [Epub ahead of print] <https://www.ncbi.nlm.nih.gov/pubmed/28388236>

BACKGROUND: The fractional radiofrequency technique (fRF) is a recently emerged technique. However, the exact outcomes of fRF for treating atrophic acne scar in Asians are still unclear now. OBJECTIVE: To compare the clinical outcomes of fRF with the fractional laser technique in Asians with atrophic acne scar. MATERIALS AND METHODS: The databases MEDLINE, EMBASE, Cochrane Central Register of Controlled Trials and Chinese National Knowledge Infrastructure (CNKI) were searched. Main clinical outcomes were participant-reported scar improvement, investigator-reported scar improvement, post-inflammatory hyperpigmentation (PIH), erythema duration, scab duration and the pain level. RESULT: Six randomized controlled trials were included in this meta-analysis. The scar improvement was similar in both groups regarding participant-reported scar improvement ($p=0.48$) and investigator-reported scar improvement ($p=0.89$). However, fRF led less occurrence of PIH in comparison with the laser group ($p<0.001$). The average duration of erythema was shorter in fRF group than the laser group ($p<0.001$). The mean time for debridement was shorter in fRF group than the carbon dioxide fractional laser system ($p=0.02$). The pain level did not differ significantly in two groups ($p=0.53$). CONCLUSION: Although some bias exists in our study, fRF appears to be a superior alternative for the treatment of atrophic acne scar in Asians.

Demodex Mite Density Determinations by Standardized Skin Surface Biopsy and Direct Microscopic Examination and Their Relations with Clinical Types and Distribution Patterns. Yun CH, Yun JH, Baek JO, et al. Ann Dermatol. 2017 Apr;29(2):137-142. doi: 10.5021/ad.2017.29.2.137. Epub 2017 Mar 24. <https://anndermatol.org/DOIx.php?id=10.5021/ad.2017.29.2.137>

BACKGROUND: Demodicosis is a parasitic skin disease caused by Demodex mites, and the determination of mite density per square centimeter is important to diagnose demodicosis. Standardized skin surface biopsy (SSSB) and direct microscopic examination (DME) are commonly used to determine Demodex mites density (Dd). However, no

study has previously compared these two methods with respect to clinical types and distribution patterns of demodicosis. **OBJECTIVE:** The aim of this study was to compare the value of SSSB and DME findings in reference to the clinical types and distribution patterns of demodicosis. **METHODS:** The medical records of 35 patients diagnosed with demodicosis between December 2011 and June 2015 were retrospectively reviewed. Demodicosis was classified according to four clinical types (pityriasis folliculorum, rosacea type, acne type, and perioral type) and three distribution patterns (diffuse pattern, U-zone pattern, and T-zone pattern). Two samples, one for SSSB and one for DME, were obtained from a lesion of each patient. **RESULTS:** In all patients, mean Dd and the proportion with a high Dd ($>5D/cm^2$) by DME (14.5 ± 3.3 , 80.0%, respectively) were higher than by SSSB (5.5 ± 1.3 , 37.1%, respectively; $p<0.01$, $p=0.02$, respectively). In terms of clinical types, for rosacea type, mean Dd and proportion with a high Dd by DME (12.4 ± 3.5 , 84.6%, respectively) were significantly greater than those determined by SSSB (3.6 ± 1.2 , 23.1%; $p=0.04$, $p=0.04$, respectively). In terms of distribution pattern, for the diffuse pattern, mean Dd and the proportion with a high Dd by DME (17.5 ± 3.7 , 100%, respectively) were significantly higher than those determined by SSSB (6.0 ± 2.7 , 26.7%; $p<0.01$, $p<0.01$, respectively). **CONCLUSION:** The results of our study revealed that DME is a more sensitive method for detecting Demodex than SSSB, especially in patients with diffuse pattern and suspected rosacea type. Further research is needed to confirm this finding.

[Download Reference Document](#)

Oral Contraceptives for Acne Treatment: Prescribing Practices of US Dermatologists. Cynthia L. Chen, MD. April 5, 2017. MDedge.com http://www.mdedge.com/cutis/article/135133/acne/oral-contraceptives-acne-treatment-prescribing-practices-us-dermatologists?utm_source=Clin_CUT_enl-b_040717&utm_medium=email&utm_content=Hyperhidrosis%20products:%20Leading%20dermatologists%20offer%20their%20top%20recommendations

In this edition of the "Peer to Peer" audiocast series, Dr. Vincent DeLeo speaks with Dr. Cynthia L. Chen about the prescribing practices of US dermatologists regarding oral contraceptives (OCPs) for acne treatment. Dr. Chen describes the results of a recent survey that was used to collect data about the demographics and practice settings of dermatologists who prescribe OCPs in the United States as well as how their knowledge and beliefs about OCPs inform their prescribing practices. She also discusses the use of 4th-generation drospirenone-containing OCPs, which have been shown to be slightly more effective for acne than other combined OCPs but also are associated with an increased risk of venous and thromboembolic events. Dr. Chen also explains her process for prescribing OCPs for acne treatment, including how to discuss the effects of hormonal treatments with patients.

Oral Contraceptives for Acne Treatment: US Dermatologists' Knowledge, Comfort, and Prescribing Practices. Fitzpatrick L, Mauer E, Chen CL. *Cutis*. 2017 March;99(3):195-201.

http://www.mdedge.com/cutis/article/132746/acne/oral-contraceptives-acne-treatment-us-dermatologists-knowledge-comfort-and?channel=171&utm_source=Clin_CUT_eTOC_031717&utm_medium=email&utm_content=OCPs%20for%20acne%20patients:%20Are%20dermatologists%20comfortable%20with%20prescribing%20them

The use of oral contraceptive pills (OCPs), which can be an effective treatment of acne in women, is poorly understood among many dermatologists. In this study, we surveyed 116 US dermatologists about their knowledge, comfort, and prescribing practices pertaining to the use of OCPs. The majority of respondents had previously prescribed OCPs and believed they were an effective treatment of acne in women. Despite adverse effects such as

increased risk for venous thromboembolism (VTE) associated with OCPs, especially those containing drospirenone, our study indicated that many dermatologists believe the benefits of increased treatment efficacy may outweigh the risks. Practice Points: - In prior reports, oral contraceptive pills (OCPs) were found to be as effective as systemic antibiotics in reducing acne lesion counts at 6 months of treatment. - Most dermatologists have prescribed OCPs and most believed they were an effective treatment for acne in women.

[Download Reference Document](#)

Clindamycin Phosphate–Tretinoin Combination Gel Revisited: Status Report on a Specific Formulation Used for Acne Treatment. Del Rosso JQ. *Cutis*. 2017 March;99(3):179-183.

http://www.mdedge.com/cutis/article/132771/acne/clindamycin-phosphate-tretinoin-combination-gel-revisited-status-report?utm_source=Clin_CUT_eTOC_031717&utm_medium=email&utm_content=OCPs%20for%20acne%20patients:%20Are%20dermatologists%20comfortable%20with%20prescribing%20them

Topical agents, including retinoids and antibiotics, are commonly used to treat acne vulgaris (AV) and remain as components of acne treatment guidelines. Approved topical combination formulations offer the advantages of established efficacy, decreased frequency of application, and improved convenience for patients. This article discusses both clindamycin phosphate (CP) and tretinoin (Tret) as components of a topical aqueous-based combination gel that has been shown to be effective, safe, and well tolerated for treatment of facial AV. Clinically relevant considerations with use of this treatment are also discussed, including therapeutic advantages and potential limitations. Practice Points: - Clindamycin phosphate (CP)–tretinoin (Tret) formulated in an aqueous gel is effective based on clinical trials of the management of acne vulgaris (AV). - The favorable tolerability of CP-Tret gel is advantageous, as topical agents often are used in combination with other therapies to treat AV, especially with a benzoyl peroxide–containing product. - The availability of 2 active agents in 1 formulation is likely to optimize compliance.

[Download Reference Document](#)

Lasers in the treatment of acne. Perper M, Tsatalis J, Eber AE, et al. *G Ital Dermatol Venereol*. 2017 Mar 28. doi: 10.23736/S0392-0488.17.05641-3. [Epub ahead of print] <https://www.ncbi.nlm.nih.gov/pubmed/28358185>

Acne is a chronic disease of the pilosebaceous units, presenting as inflammatory or noninflammatory lesions, affecting primarily the face but also the back and chest. The mainstay of treatment remains topical retinoids, benzoyl peroxide, azelaic acid, antibiotics, and isotretinoin, many of which result in poor compliance, lack of durable remission, and incur adverse effects. The use of lasers to treat acne is continuously increasing because of their minimal complications, limited number of office-based treatments required, potential benefits of simultaneously treating acne scarring, and the rapid onset of results. The 1450 nm diode laser, 585- and 595-nm pulsed dye lasers, near infrared diode lasers, 1320 nm Nd:YAG laser, 532 nm potassium titanyl phosphate laser, 1064 nm long-pulsed Nd: YAG laser, 1540 nm Erbium (Er):Glass Laser, and the 1550 nm Erbium (Er):Glass fractional laser are among the most common lasers used to treat acne and acne scarring. These lasers target the underlying causes of acne including the colonization of *Propionibacterium acnes*, high levels of sebum production, altered keratinization, inflammation, and bacterial colonization of hair follicles on the face, neck, and back. We review the efficacy and side effect profiles of various lasers used to treat acne.

Autoinflammatory syndromes associated with hidradenitis suppurativa and/or acne. Vinkel C, Thomsen SF.

Int J Dermatol. 2017 Mar 27. doi: 10.1111/ijd.13603. [Epub ahead of print]

<https://www.ncbi.nlm.nih.gov/pubmed/28345207>

Autoinflammatory syndromes associated with hidradenitis suppurativa (HS) and/or acne are rare but potentially debilitating disorders if not diagnosed and treated correctly. They share a common pathogenesis involving a dysregulated innate immune system with abnormal interleukin (IL)-1 signaling leading to sterile neutrophilic inflammation. The clinical features are recurrent episodes of fever, painful arthritis, and skin lesions consistent with HS, acne, and pyoderma gangrenosum (PG) accompanied by elevated systemic inflammatory markers in blood. So far, several clinically different syndromes have been reported in the literature including pyoderma gangrenosum, acne, and pyogenic arthritis (PAPA), pyoderma gangrenosum, acne, and hidradenitis suppurativa (PASH), pyoderma gangrenosum, acne, and spondyloarthritis (PASS), pyoderma gangrenosum, acne, pyogenic arthritis, and hidradenitis suppurativa (PAPASH), psoriatic arthritis, pyoderma gangrenosum, acne, and hidradenitis suppurativa (PsAPASH), and pyoderma gangrenosum, acne, and ulcerative colitis (PAC). The rarity of the syndromes complicates the establishment of evidence-based treatment guidelines. Furthermore, treatment can be challenging due to lack of response to standard treatment modalities. Therefore, it is important to increase the awareness about these diseases in order to optimize disease management and ultimately improve the quality of life of patients.

Isotretinoin treatment for acne and risk of depression: A systematic review and meta-analysis. Huang Y-C,

Cheng Y-C. J Am Acad Dermatol. Article in Press. Published online: March 10, 2017. DOI:

<http://dx.doi.org/10.1016/j.jaad.2016.12.028> [http://www.jaad.org/article/S0190-9622\(16\)31289-0/abstract](http://www.jaad.org/article/S0190-9622(16)31289-0/abstract)

Background: The relationship between isotretinoin treatment for acne and depression is controversial. Quantitative analysis has not yet been conducted. Objective: To conduct a meta-analysis, evidence-based examination of the relationship between isotretinoin and depression. Method: A systematic review and meta-analysis of the literature published from inception to September 30, 2016, was conducted. Controlled or prospective non-controlled trials on ≥ 15 acne patients receiving isotretinoin treatment were included. The prevalence of depression and change in depression scores were calculated. Result: Thirty-one studies met the inclusion criteria. In the controlled studies, the change in depression scores from baseline was not significantly different between patients receiving isotretinoin treatment and those receiving an alternative treatment (standardized mean difference [SMD] -0.334 , 95% confidence interval [CI] -0.680 to 0.011). The prevalence of depression after isotretinoin treatment significantly declined (relative risk [RR] 0.588 , 95% CI $0.382-0.904$). The mean depression scores significantly decreased from baseline (SMD -0.335 , 95% CI -0.498 to -0.172). Limitations: No randomized controlled trials were reviewed; a large inter-study variation was observed. Conclusions: Isotretinoin treatment for acne does not appear to be associated with an increased risk for depression. Moreover, the treatment of acne appears to ameliorate depressive symptoms.

[Download Reference Document](#)**Incidence of hidradenitis suppurativa in the United States: A sex- and age-adjusted population analysis.**

Garg A, Lavian J, Lin G, Strunk A, Alloo A. J Am Acad Dermatol. Article in Press. Published online: March 09, 2017.

DOI: <http://dx.doi.org/10.1016/j.jaad.2017.02.005> [http://www.jaad.org/article/S0190-9622\(17\)30163-9/abstract](http://www.jaad.org/article/S0190-9622(17)30163-9/abstract)

Background: The true incidence of hidradenitis suppurativa (HS) is unknown. Objective: To determine standardized incidence estimates for HS in the United States. Methods: We used a retrospective cohort analysis, including incident HS cases identified using electronic health records data for a demographically heterogeneous population-based sample of >48 million unique patients across all 4 census regions. We calculated standardized 1- and 10-year cumulative incidences for the overall population and for sex-, age-, and race-specific groups. Results: There were 5410 new HS diagnoses over a 1-year period, with an incidence of 11.4 (95% confidence interval [CI], 11.1-11.8) cases per 100,000 population. One-year incidence in women was 16.1 (95% CI, 15.5-16.6) per 100,000, more than twice that of men [6.8 (95% CI, 6.5-7.2) per 100,000; $P < .0001$]. Age group-specific incidence was highest among patients 18 to 29 years of age [22.0 (95% CI, 21.0-23.2) per 100,000]. Incidence among African Americans [30.6 (95% CI, 29.1-32.2) per 100,000] was >2.5 times that of whites [11.7 (95% CI, 11.3-12.2) per 100,000; $P < .0001$]. The average annual overall incidence over 10 years was 8.6 (95% CI, 8.6-8.7) per 100,000 population. Limitations: The use of deidentified claims prevented validation for a larger case subset. Conclusion: HS incidence has increased over the past decade and disproportionately involves women, young adults, and African Americans.

Hidradenitis Suppurativa Scoring Systems: Can We Choose Just One? Porter ML, Kimball AB. *Cutis*. 2017 March;99(3):156-157. http://www.mdedge.com/cutis/article/132740/rare-diseases/hidradenitis-suppurativa-scoring-systems-can-we-choose-just-one?oc_slh=49529a1f044e5d993a04d9c11a6f073db224ff4dc841b27c873376ba0408b6ae&channel=27474&utm_source=Clin%5FCUT%5FeTOC%5F031717&utm_medium=email&utm_content=OCPs%20for%20acne%20patients%3A%20Are%20dermatologists%20comfortable%20with%20prescribing%20them%3F

Interest in hidradenitis suppurativa (HS) has exploded in the last few years. A PubMed search of articles indexed for MEDLINE using the MeSH term hidradenitis suppurativa yielded more than 900 articles on HS since 1947, with a sharp increase in publications over the last few years and 119 articles published in 2015 alone. In addition to publications, we recently saw adalimumab become the first and only US Food and Drug Administration–approved treatment of moderate to severe HS. With new treatment options and enthusiasm for HS, further attention needs to be paid to the scoring systems or outcome measures that clinicians use to grade HS severity and disease. Utilization of validated outcome measures allows for comparability between treatment effects, which is essential for clinical trials, meta-analyses, and monitoring of treatment response in daily clinical practice. Designing a scoring scale for any dermatologic disease is challenging; however, as we move forward with value-based reimbursement models, we likely will encounter quality reporting guidelines that mandate providers demonstrate the positive impact of treatment. Thus, scoring systems for HS, particularly ones that accurately assess this impact of treatment, are essential.

[Download Reference Document](#)

A Systematic Review on Oral Isotretinoin Therapy and Clinically Observable Wound Healing in Acne Patients. McDonald KA, Shelley AJ, Alavi A. *J Cutan Med Surg*. 2017 Mar 1:1203475417701419. doi: 10.1177/1203475417701419. [Epub ahead of print] <https://www.ncbi.nlm.nih.gov/pubmed/28362520>

The association between isotretinoin and atypical wound healing remains controversial. It is common practice to delay elective procedures for 6 to 24 months after oral isotretinoin therapy. The studies supporting common practices (SCP) recommend extending this period to include the 6 to 24 months preceding treatment. The opposing studies (challenging common practices; CCP) state that the rate of scarring in isotretinoin patients is low and that

delaying elective procedures is unnecessary. These practices impact a large number of dermatology patients undergoing acne treatment. This systematic review compiled articles obtained from online databases and examined data from both SCP and CCP studies. The inconsistencies in the reported data and the methodological flaws in the literature preclude any firm conclusions that can resolve the controversy. As such, this review demonstrates that there is insufficient evidence to either corroborate or refute delaying elective procedures in isotretinoin acne patients. Although the recent literature trends toward removing the procedural delay, we advocate for clinicians to consider the research presented in this review in the context of their own clinical experience and each individual patient's situation. The possible negative procedural outcomes must be weighed against the severity of the patient's acne scarring and the psychosocial impact of this scarring on the patient.

Patient Counseling/Communication

The role of wide local excision for the treatment of severe hidradenitis suppurativa (Hurley grade III): Retrospective analysis of 74 patients. Posch C, Monshi B, Quint T, et al. *J Am Acad Dermatol.* 2017 Apr 1. pii: S0190-9622(17)30149-4. doi: 10.1016/j.jaad.2017.01.055. [Epub ahead of print] [http://www.jaad.org/article/S0190-9622\(17\)30149-4/abstract](http://www.jaad.org/article/S0190-9622(17)30149-4/abstract)

BACKGROUND: Effective medical treatment for patients with severe hidradenitis suppurativa (HS) is limited. **OBJECTIVES:** We sought to measure the impact of wide local excision on quality of life in HS Hurley grade III patients and to examine the rate of postoperative complications, disease recurrences, and satisfaction with the cosmetic results. **METHODS:** Seventy-four patients were enrolled. Outcome measures included Dermatology Life Quality Index responses, disease duration, recurrence, previous therapies, postoperative complications, and satisfaction with cosmetic results. **RESULTS:** Most patients had inguinogenital/gluteal disease (68.9%, $P < .001$). Involvement of both the axillary and the inguinogenital/gluteal areas were pronounced in male patients ($P = .018$). None of the patients was treated with tumor necrosis factor- α inhibitors. Most patients (71.6%) had a disease history of >5 years at the time of presentation and multiple unsuccessful attempts with systemic and local therapeutic interventions. Wide local excision improved Dermatology Life Quality Index scores from initially 27.89 to 5.31 after surgery ($P < .001$), independent of localization ($P = .195$). Forty-seven percent of patients had postoperative complications, most frequently pain and scarring. The vast majority of patients (70.3%) were satisfied with the cosmetic results. **LIMITATIONS:** The retrospective nature of the study was a limitation. **CONCLUSIONS:** Wide local excision significantly improves the quality of life of HS patients. Local recurrence rates are low, and satisfaction with the cosmetic results is high.

[Download Reference Document](#)

Hidradenitis suppurativa gains increasing interest on World Wide Web: a source for patient information? Hessam S, Salem J, Bechara FG, et al. *Int J Dermatol.* 2017 Mar 21. doi: 10.1111/ijd.13601. [Epub ahead of print] <https://www.ncbi.nlm.nih.gov/pubmed/28321845>

BACKGROUND: Gathering health information from Internet websites is increasingly utilized by patients. No data exist about hidradenitis suppurativa (HS)-related online health information. Thus, we aimed to study the quality, popularity, readability, and timeliness of the most frequented websites on HS. **METHODS:** Google Trends was used to evaluate the public interest in HS. An Internet search on Google was performed for the terms "hidradenitis suppurativa," "acne inversa," and "Verneuil's disease." Readability scores, HONcode quality certification, Alexa

popularity rank, and content were assessed. RESULTS: Google search queries on HS have steadily risen in the last 10 years. The website analysis revealed 39 unique websites, which were difficult to read. Ten websites (26%) had HONcode quality certification, and the median (IQR) Alexa popularity rank was 48871 (2333-361275). Thirteen websites (33%) yielded disease-specific photos with a median rating between "quite useful" and "uncertain." A therapy option with adalimumab was mentioned on 11 websites (28%). CONCLUSIONS: In addition to an increasing interest, we found a broad variation in the quality, readability, popularity, and timeliness of content on HS-related websites. Improvement of the quality and readability of HS-related websites is desirable to potentially raise disease awareness and contribute to an earlier presentation of patients suffering with undiagnosed HS.

Acne affects self-confidence of many teenagers, survey finds. March 25, 2017. News Medical. <http://www.news-medical.net/news/20170325/Acne-affects-self-confidence-of-many-teenagers-survey-finds.aspx>

Growing up can be hard for any teenager without the added stress of acne. Sadly acne affects around 80% of adolescents aged 13-18 years at some point. Three out of five teenagers surveyed by the British Skin Foundation said that the biggest impact acne has on their lives is a fall in self-confidence. Dr Anjali Mahto, Consultant Dermatologist & British Skin Foundation spokesperson explains: "Acne is a disorder of the pilosebaceous unit in skin, which is composed of a sebaceous gland (oil producing gland), hair follicle, and hair. Acne develops due to a complex interaction between excess oil production, bacterial proliferation, and "sticky" skin cells lining the hair follicle, which lead to inflammation. Acne can have a number of appearances. It can present as a combination of comedones (blackheads and whiteheads), pus-filled spots (pustules) or deep painful red cysts. Its severity can vary from a few spots on the face, neck, back and chest to a more significant problem that may cause scarring and profound impact on self-confidence." Despite acne being so common, there are still many misconceptions that surround it. Myths include that acne sufferers are dirty or don't wash properly, that their diet is poor or that they will 'grow out of it'. These myths play a huge part in the stigma surrounding the condition and the perception of it by non-sufferers. In fact, British Skin Foundation statistics show that teenagers with acne can often be bullied by friends, family and even people they don't know. Our survey of 10-18 year-olds with acne found that: - 62% reported being verbally abused by friends, family or a person they know because of their acne; - 40% reported being verbally abused by a member of the public due to their acne; - 46% reported being bullied regularly due to their acne. Worryingly, this can lead to thoughts of self-harm or even suicide: - 19% have contemplated suicide due to their acne, with another 4% actually attempting suicide; - 19% have considered self-harm and a further 16% have actually self-harmed. More positively, our survey discovered that almost half (48%) of 10-18 year-olds surveyed rely on their family for support for their acne.

Acne in Men. By Liji Thomas, MD. News Medical. <http://www.news-medical.net/health/Acne-in-Men.aspx>

Acne is a skin condition caused by excessive sebum secretion, which piles up inside the hair follicles to form open and closed comedones, also called blackheads and whiteheads, respectively. Mild, moderate and severe forms of acne are usually distinguished clinically. The condition is most common in adolescence and early adulthood, albeit can occur well into the forties. It has been postulated to be affected by the levels of sex hormones; however, this in turn may only be a symptom of a deeper anomaly. In keeping with this, the following indicators have been found to be associated with acne in males: - A higher body mass index (BMI) and waist-hip ratio (WHR) which correlate with greater body fat; - Higher levels of blood pressure, both systolic and diastolic; - Higher basal glucose concentrations; - Higher insulin levels when challenged with an oral glucose tolerance test (OGTT).