



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

TopMD appoints dermatologist to medical advisory board.....2
Foamix begins dosing in phase 3 study of minocycline foam for acne.2
Mobile app for acne geared to teenagers.2

New Medical Research

Long term management of distinct facial flushing and persistent erythema..... 3
Skin Surface pH in Acne Vulgaris: Insights from an Observational Study..... 3
The oral adverse effects of isotretinoin treatment in acne vulgaris patients:..... 4
Lack of Significant Anti-inflammatory Activity With Clindamycin in the Treatment 4
Non-antibiotic Isotretinoin Treatment Differentially Controls Propionibacterium 4
Comparison of Salicylic Acid 30% Peel and Pneumatic Broadband Light 5
Autoinflammation in pyoderma gangrenosum and its syndromic form..... 5
Bacterial biofilm in chronic lesions of hidradenitis suppurativa.6

Clinical Reviews

Synchronizing Pharmacotherapy in Acne with Review of Clinical Care. 6
Spotlight on brimonidine topical gel 0.33% for facial erythema of rosacea: 7
Evidence-based recommendations for the management of acne fulminans..... 7
Topical Alpha-Agonist Therapy for Persistent Facial Erythema of Rosacea and..... 8
Incidence of hidradenitis suppurativa in the United States: A sex- and age..... 8
Management of hidradenitis suppurativa in pregnancy. 9
New Concepts in Treating Persistent Facial Redness of Rosacea. 9
Health-related quality of life in hidradenitis suppurativa. 9
Hormonal therapies for acne. 10
Chemical peels in active acne and acne scars..... 10
Topical treatments for acne. 10

Patient Communication / Counseling

Generic Drugs—Changes in Cost and Challenges in Practice. 11
Clinical efficacy and safety of benzoyl peroxide for acne vulgaris:..... 11
Teens, Acne, and Oral Contraceptive Pills the Need for Greater Clarity..... 11
The Use of Cosmeceuticals in Acne: Help or Hoax?..... 12

TopMD appoints dermatologist to medical advisory board. August 4, 2017.

<https://www.healio.com/dermatology/dermatitis/news/online/%7B5b466304-915e-4caa-b7d3-d317ee6cab9f%7D/topmd-appoints-dermatologist-to-medical-advisory-board>

TopMD, the parent company of CLn Skin Care, announced it has appointed Kristin A. Romine, MD, to its medical advisory board. Romine is founder of Camelback Dermatology & Skin Surgery in Phoenix, Arizona., and specializes in surgical, cosmetic and laser dermatology, according to a news release. She also is an adjunct faculty member at Midwestern University, Glendale, Arizona. "As a practicing dermatologist, I've had experience with an array of inflammatory skin diseases and products to treat those chronic conditions," Romine stated in the release. "[Romine] is a national thought leader in the field of dermatology with robust expertise in the comprehensive diagnosis and treatment of acute and chronic diseases of the skin, hair and nails, as well as specialization in Mohs micrographic surgery for skin cancer," Azam Anward, MD, founder of TopMD, stated in the release. "Her insights will keep CLn at the forefront of skin care and therapeutic cleansing." Reference: www.clnwash.com

Foamix begins dosing in phase 3 study of minocycline foam for acne. August 3, 2017. Healio Dermatology

News. <https://www.healio.com/dermatology/acne/news/online/%7B7c1c43ad-19b4-498d-b177-fb1774bdb831%7D/foamix-begins-dosing-in-phase-3-study-of-minocycline-foam-for-acne>

Foamix Pharmaceuticals announced that the first patient has been dosed in its third phase 3 study to measure the efficacy and safety of FMX101, its topical minocycline foam 4%, in patients with moderate-to-severe acne. "During a recent Type B meeting, the FDA confirmed that statistically significant findings from a third study would constitute replication of the Study FX2014-05 results, and would be sufficient to establish an efficacy claim," David Domzalski, CEO of Foamix, stated in a news release. "This confirmation supports our plans for conducting a third phase 3 study." FX2017-22, a double-blind, vehicle-controlled study, will enroll 1,500 patients with moderate-to-severe acne at approximately 0 sites throughout the U.S., according to the release. Patients will be randomized 1:1 to either 4% minocycline foam or vehicle, with once daily treatment for 12 weeks. The proportion of patients achieving a score of "clear" or "almost clear" and at least a 2 category improvement from baseline using the Investigator's Global Assessment at week 12, and the mean change from baseline in inflammatory lesion counts in each treatment group at week 12 are primary endpoints of the study, according to the release. Reported adverse events, tolerability, clinical laboratory tests and vital signs will be included in the safety measures. Reference: www.foamix.co.il

Mobile app for acne geared to teenagers. August 1, 2017. Healio Dermatology News.

<https://www.healio.com/dermatology/acne/news/online/%7B8d1141d9-4b9a-467d-93a6-807e53ba575f%7D/mobile-app-for-acne-geared-to-teenagers>

Cutanea Life Sciences announced the introduction a new mobile application for patients who are prescribed Aktipak (erythromycin and benzoyl peroxide) Gel, 3%/5%, a combination erythromycin and benzoyl peroxide therapy indicated for the topical treatment of acne vulgaris. "Most teens today have three things in common: they have acne, they're always on the go, and they're into digital technology, including smartphones and the 'selfie' phenomenon," Daniel Roling, MD, a Philadelphia area dermatologist, stated in a news release. "For teenagers prescribed Aktipak, the 'Facing Forward' mobile app should be a welcome and valuable aid in monitoring compliance and treatment progress." Features of the app include a camera function that enables users to take a "photo journal" of their face and track their progress while they are undergoing treatment with Aktipak, according to the release. Other features include an instructional video on how to mix the product, dosing reminders, prescription

refill reminders, a compliance report and acne information resources. The app will be available free through the Apple Store or Google Play, according to Cutanea Life Sciences. Aktipak is a portable, freshly mixed, patient-blended therapy. The product comes in pocket-sized, single-dose, dual-chamber pouches, each of which contain antibiotic erythromycin and antibacterial benzoyl peroxide in separate chambers. The patient is instructed to open the pouch and blend the gel contents immediately prior to use. The product is contraindicated in individuals who have shown hypersensitivity to any of its components, according to the release. Reference: www.cutanea.com.

New Medical News

Long term management of distinct facial flushing and persistent erythema of rosacea by treatment with carvedilol. Pietschke K, Schaller M. *J Dermatolog Treat.* 2017 Jul 27:1-16. doi: 10.1080/09546634.2017.1360991. [Epub ahead of print] <https://www.ncbi.nlm.nih.gov/pubmed/28748731>

BACKGROUND: The treatment of persistent erythema and flushing episodes in patients with rosacea remains a clinical challenge. A possible therapeutic option could be given by the use of antihypertensive drugs. **OBJECTIVES:** We therefore evaluated the effect of the non-selective β -blocker carvedilol in five caucasian patients. **METHODS:** In a monocentric, retrospective case study the patients were treated with carvedilol titrated up to 12.5 mg twice a day over at least six months. Patient's self-assessment (PSA), Clinicians erythema assessment (CEA) and the patients levels of embarrassment and satisfaction were performed by questionnaires. **RESULTS:** The CEA grade description as well as the PSA grade description decreased remarkable in all five patients. Furthermore all patients reported to have a major improvement of their level of satisfaction and no feelings of embarrassment anymore. **CONCLUSIONS:** These findings demonstrate facial flushing and persistent erythema can be effectively treated by carvedilol long-term with a fast onset of improvement in a dose well tolerated.

Skin Surface pH in Acne Vulgaris: Insights from an Observational Study and Review of the Literature. Prakash C, Bhargava P, Tiwari S, et al. *J Clin Aesthet Dermatol.* 2017;10(7):33–39 <http://jcadonline.com/skin-surface-ph-in-acne-vulgaris-insights-from-an-observational-study-and-review-of-the-literature/>

Objective: Recurrent and chronic course of acne vulgaris, despite effect-proven therapies, point to an underfocused aspect in its pathogenesis and management. This study aims to assess in subjects with and without acne, the skin surface pH, a parameter that cumulatively represents functioning of various units of skin, including the barrier. **Methods:** A total of 200 patients with acne and 200 age- and sex-matched controls were included. Under basal conditions, facial skin pH was derived from five sites using a skin pH-meter. The relation between skin pH and acne was evaluated according to sex. **Results:** There were more subjects with normal skin pH in the control group compared to the case group, and the majority of acne occurrences in the case group were related to high skin pH ($p=0.000$). Mean pH among cases was higher than normal reference value (pH 4.5–5.5 for women, 4–5.5 for men) and that of controls ($p<0.001$). No significant association was observed between sex and skin pH in either cases or controls ($p>0.05$). **Conclusion:** Increased facial skin pH in patients with acne at basal conditions mirrors a chronic state of stratum corneum instability, which could be predisposing individuals to acne occurrence and/or recurrences. It could possibly be a common domain via which the classical pathomechanisms might be acting in acne. Integrating measures that maintain stratum corneum pH during therapy might prove worthwhile.

[Download Reference Document](#)

The oral adverse effects of isotretinoin treatment in acne vulgaris patients: A prospective, case-control study. Erdemir U, Okan G, Gungor S, et al. *Niger J Clin Pract.* 2017 Jul;20(7):860-866. doi: 10.4103/1119-3077.183248. <https://www.ncbi.nlm.nih.gov/pubmed/28791981>

BACKGROUND: Isotretinoin is the most effective therapy to treat severe acne vulgaris and its systemic adverse effects have been well documented, but little is known on dental side effects over the course of treatment. **OBJECTIVES:** This prospective case-control study aimed to evaluate the oral adverse effects of isotretinoin in Turkish patients with acne vulgaris; compare oral conditions between patients and normal controls; and investigate the association between salivary parameters and International Caries Detection and Assessment System (ICDAS) scores. **MATERIALS AND METHODS:** For 6 months, the patients (n = 45) received isotretinoin daily (0.5 mg/kg). The age-matched untreated controls (n = 45) were patients without acne. Both groups were examined before the study and at 6 months for salivary flow, buffer capacity, microbiologic tests, and caries status (based on the ICDAS). Salivary parameters and ICDAS scores were analyzed by Spearman's rank correlations. Data were statistically analyzed by the Mann-Whitney U test, Wilcoxon signed rank tests, and McNemar's Chi-square tests (P < 0.05). **RESULTS:** Twenty-two isotretinoin-treated patients and 18 controls completed the study. At baseline, the groups were not significantly different in the evaluated parameters (P > 0.05). At 6 months in the isotretinoin-treated group, salivary flow and buffer capacity significantly decreased, and the ICDAS scores significantly increased (P < 0.05). The changes in these criteria from baseline were insignificant in the controls (P > 0.05). Intraoral pathogen counts were not significantly different between the groups, compared to baseline (P > 0.05). Stimulated salivary parameters in both groups were not correlated significantly with the ICDAS scores. **CONCLUSIONS:** Isotretinoin significantly affected salivary flow, buffer capacity, caries lesion activity scores for 6 months. However, salivary parameters and caries lesion activity scores had no significant correlations.

Lack of Significant Anti-inflammatory Activity With Clindamycin in the Treatment of Rosacea: Results of 2 Randomized, Vehicle-Controlled Trials *Cutis.* 2017 July;100(1):53-58. Martel P, Jarratt M, Weiss J, Carlavan I, <http://www.mdedge.com/cutis/article/141834/rosacea/lack-significant-anti-inflammatory-activity-clindamycin-treatment?channel=171>

Rosacea is a chronic inflammatory skin disease of the face. The objective of the studies described here was to evaluate the efficacy of clindamycin in the treatment of rosacea. Two multicenter, randomized, vehicle-controlled, phase 2 studies were conducted in participants with moderate to severe rosacea. Study A was a 12-week dose-comparison, 5-arm, parallel group comparison of clindamycin cream 1% or vehicle once or twice daily and clindamycin cream 0.3% once daily. Study B was a 2-arm comparison of twice daily clindamycin gel 1% versus vehicle gel. A total of 629 participants (study A, N=416; study B, N=213) were randomized. The results of these studies indicated that clindamycin cream 0.3% and 1% and clindamycin gel 1% were no more effective than the vehicle in the treatment of moderate to severe rosacea, suggesting clindamycin has no intrinsic anti-inflammatory activity in rosacea.

[Download Reference Document](#)

Non-antibiotic Isotretinoin Treatment Differentially Controls Propionibacterium acnes on Skin of Acne Patients. Ryan-Kewley AE, Williams DR, Hepburn N, Dixon RA. *Front Microbiol.* 2017 Jul 25;8:1381. doi: 10.3389/fmicb.2017.01381. eCollection 2017. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5524737/>

Emergence and potential transfer of antibiotic resistance in skin microorganisms is of current concern in medicine especially in dermatology contexts where long term treatment with antibiotics is common. Remarkably, non-

antibiotic therapy in the form of isotretinoin - a non-antimicrobial retinoid is effective at reducing or eradicating the anaerobe *Propionibacterium acnes* which is causally involved in the complex pathogenesis of *Acne vulgaris*. This study measured the extent of colonization of *P. acnes* in patients with primary cystic or severe acne from three defined skin sites in 'non-lesion' areas before, during and after treatment with isotretinoin. Patients attending acne clinics were investigated using standardized skin sampling techniques and the recovery of anaerobic *P. acnes* from 56 patients comprising 24 females and 32 males (mean age 22 years, age range 15-46 years) who were given a standard course of isotretinoin (1 mg/kg/day) are reported. *P. acnes* cultured from the external cheek surface of patients following treatment showed a significant reduction (1-2 orders of magnitude) compared with their pre-treatment status. Interestingly, other distinct sites (nares and toe web) failed to show this reduction. In addition, high levels of antibiotic-resistant *P. acnes* were recorded in each patients' skin microbiota before, during and after treatment. In this study, microbial composition of the skin appears substantially altered by isotretinoin treatment, which clearly has differential antimicrobial effects on each anatomically distinct site. Our study confirmed that orally administered isotretinoin shows good efficacy in the resolution of moderate to severe acne that correlates with reductions in the number of *P. acnes* on the skin, including resistant isolates potentially acquired from previous treatments with antibiotics. Our study suggests that the role of tetracycline's and macrolides, which are currently first line treatments in dermatology, might be reserved for severe or life-threatening infections since current antibiotic stewardship guidelines from medical departments no longer prescribe these antibiotics for routine use.

[Download Reference Document](#)

Comparison of Salicylic Acid 30% Peel and Pneumatic Broadband Light in the Treatment of Mild to Moderately Severe Facial Acne Vulgaris *Cutis*. 2017 July;100(1):43-48. Author(s): Thuangtong R, Tangjaturonrusamee C, Rattanaumpawan P, Ditre CM, MD
<http://www.mdedge.com/cutis/article/141812/acne/comparison-salicylic-acid-30-peel-and-pneumatic-broadband-light-treatment?channel=171>

Acne patients experience not only a medical disease but also an aesthetic condition, and this latter complication greatly motivates patients to seek out the best treatment regimen to hasten improvement in their appearance. The available clinical procedures for acne treatment include salicylic acid 30% peel and pneumatic broadband light (PBBL). The objective of this study was to compare the efficacy of salicylic acid 30% peel and PBBL treatments in patients with mild to moderately severe facial acne vulgaris. Twelve patients were recruited for a 12-week prospective, single-blind, randomized, split-face study. Patients were treated with a salicylic acid 30% peel on one side of the face and PBBL treatment was administered on the opposite side of the face for 6 consecutive weeks without other acne treatments. At every visit, treatment evaluations were performed using a modified Global Acne Grading Score (mGAGS), acne quality of life (QOL) questionnaire, Wong-Baker FACES Pain Rating Scale (WBPRS) assessments, and clinical photography. Improvement in acne symptoms was observed for both treatment procedures without significant differences and with minimal side effects. Salicylic acid 30% peel and PBBL were well tolerated in our study, and both clinical procedures were efficacious and well-tolerated by the patients.

[Download Reference Document](#)

Autoinflammation in pyoderma gangrenosum and its syndromic form (pyoderma gangrenosum, acne and suppurative hidradenitis). Marzano AV, Damiani G, Ceccherini I, et al. *Br J Dermatol*. 2017 Jun;176(6):1588-1598. doi: 10.1111/bjd.15226. Epub 2017 Apr 16. <https://www.ncbi.nlm.nih.gov/pubmed/27943240/>

BACKGROUND: Pyoderma gangrenosum (PG) is a rare skin disease characterized clinically by ulcers with undermined borders, and histologically by neutrophil-rich infiltrates. PG may occur alone, in syndromic forms or

associated with systemic diseases, such as inflammatory bowel disease and haematological or rheumatological disorders. **OBJECTIVES:** To determine a specific genetic background related to autoinflammation for PG. **METHODS:** We assessed autoinflammation by evaluating the cytokine profile and genes involved in classic autoinflammatory diseases in 13 patients with PG and in seven patients with the syndromic form, known as PASH (pyoderma gangrenosum, acne and suppurative hidradenitis). **RESULTS:** In skin samples, the expression of interleukin (IL)-1 β and its receptors, IL-17 and its receptor, and tumour necrosis factor- α and its receptors were significantly higher in both PG ($P = 0.001$) and in PASH ($P < 0.001$) than in controls. The chemokines IL-8; chemokine (C-X-C motif) ligand 1/2/3; chemokine (C-X-C motif) ligand 16; and RANTES (regulated on activation, normal T-cell-expressed and secreted) were also overexpressed. Cases of PG and PASH showed mutations in the autoinflammatory genes MEFV, NLRP3, NLRP12, NOD2, LPIN2 and PSTPIP1. **CONCLUSIONS:** Overexpression of cytokines/chemokines, along with genetic changes, supports the hypothesis that PG and its syndromic form, PASH, are a spectrum of polygenic autoinflammatory conditions.

[Download Reference Document](#)

Bacterial biofilm in chronic lesions of hidradenitis suppurativa. Ring HC, Bay L, Nilsson M, et al. *Br J Dermatol.* 2017 Apr;176(4):993-1000. doi: 10.1111/bjd.15007. Epub 2017 Feb 19. <https://www.ncbi.nlm.nih.gov/pubmed/27564400>

BACKGROUND: Chronic nonhealing or recurrent inflammatory lesions, reminiscent of infection but recalcitrant to antibiotic therapy, generally characterize biofilm-driven diseases. Chronic lesions of hidradenitis suppurativa (HS) exhibit several characteristics, which are compatible with well-known biofilm infections. **OBJECTIVES:** To determine and quantify the potential presence of bacterial aggregates in chronic HS lesions. **METHODS:** In 42 consecutive patients with HS suffering from chronic lesions, biopsies were obtained from lesional as well as from perilesional skin. Samples were investigated using peptide nucleic acid-fluorescence in situ hybridization in combination with confocal laser scanning microscopy. In addition, corresponding histopathological analysis on haematoxylin and eosin slides was performed. **RESULTS:** Biofilms were seen in 67% of the samples of chronic lesions and in 75% of the perilesional samples. The mean diameter of aggregates in lesional skin was significantly greater than in perilesional skin ($P = 0.01$). Large biofilms (aggregates $> 50 \mu\text{m}$ in diameter) were found in 42% of lesional samples and in only 5% of the perilesional samples ($P = 0.009$). The majority of the large biofilms were situated in sinus tracts (63%) or in the infundibulum (37%). The majority of the sinus tract samples (73%) contained active bacterial cells, which were associated with inflammation. **CONCLUSIONS:** This study suggests that biofilm formation is associated with inflammation of chronic HS lesions. The aggregates most likely occur as a secondary event, possibly due to predisposing local anatomical changes such as sinus tracts (tunnels), keratinous detritus and dilated hair follicles.

[Download Reference Document](#)

Clinical Reviews

Synchronizing Pharmacotherapy in Acne with Review of Clinical Care. Sacchidanand SA, Lahiri K, Godse K3, Patwardhan NG, et al. *Indian J Dermatol.* 2017 Jul-Aug;62(4):341-357. doi: 10.4103/ijid.IJD_41_17. <https://www.ncbi.nlm.nih.gov/pubmed/28794543>

Acne is a chronic inflammatory skin disease that involves the pathogenesis of four major factors, such as androgen-induced increased sebum secretion, altered keratinization, colonization of *Propionibacterium acnes*, and

inflammation. Several acne mono-treatment and combination treatment regimens are available and prescribed in the Indian market, ranging from retinoids, benzoyl peroxide (BPO), anti-infectives, and other miscellaneous agents. Although standard guidelines and recommendations overview the management of mild, moderate, and severe acne, relevance and positioning of each category of pharmacotherapy available in Indian market are still unexplained. The present article discusses the available topical and oral acne therapies and the challenges associated with the overall management of acne in India and suggestions and recommendations by the Indian dermatologists. The experts opined that among topical therapies, the combination therapies are preferred over monotherapy due to associated lower efficacy, poor tolerability, safety issues, adverse effects, and emerging bacterial resistance. Retinoids are preferred in comedonal acne and as maintenance therapy. In case of poor response, combination therapies BPO-retinoid or retinoid-antibacterials in papulopustular acne and retinoid-BPO or BPO-antibacterials in pustular-nodular acne are recommended. Oral agents are generally recommended for severe acne. Low-dose retinoids are economical and have better patient acceptance. Antibiotics should be prescribed till the inflammation is clinically visible. Antiandrogen therapy should be given to women with high androgen levels and are added to regimen to regularize the menstrual cycle. In late-onset hyperandrogenism, oral corticosteroids should be used. The experts recommended that an early initiation of therapy is directly proportional to effective therapeutic outcomes and prevent complications.

Spotlight on brimonidine topical gel 0.33% for facial erythema of rosacea: safety, efficacy, and patient acceptability. Anderson MS, Nadkarni A, Cardwell LA, et al. Patient Prefer Adherence. 2017 Jul 6;11:1143-1150. doi: 10.2147/PPA.S115708. eCollection 2017. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5505675/>

BACKGROUND: Brimonidine tartrate is a highly selective alpha 2 agonist that induces direct vasoconstriction of small arteries and veins, thereby reducing vasodilation and edema. **OBJECTIVE:** To review the current literature regarding the safety, efficacy, and patient acceptability of brimonidine 0.33% gel. **METHODS:** A PubMed search was performed using the terms brimonidine 0.33% gel, rosacea, safety, efficacy, and acceptability. Peer-reviewed clinical trials and case reports from 2012 to 2016 were screened for inclusion of safety, efficacy, and/or patient acceptability data. **RESULTS:** Brimonidine topical gel 0.33% is associated with mild, transient skin-related adverse reactions. Efficacy may be achieved within 30 minutes of administration with maximal reductions in erythema 3-6 hours after administration. Patient satisfaction with use of brimonidine topical gel is superior to vehicle gel for facial appearance, treatment effect, facial redness, and daily control of facial redness. **LIMITATIONS:** Studies were typically limited to 1-year follow-up. Only one study has examined the use of brimonidine topical gel in combination with other rosacea and acne medications. **DISCUSSION:** Brimonidine topical gel 0.33% is a safe, effective, and patient-accepted treatment for facial erythema of rosacea.

[Download Reference Document](#)

Evidence-based recommendations for the management of acne fulminans and its variants. Greywal T, Zaenglein AL, Baldwin HE, et al. J Am Acad Dermatol. 2017 Jul;77(1):109-117. doi: 10.1016/j.jaad.2016.11.028. <https://www.ncbi.nlm.nih.gov/pubmed/?term=Evidence-based+recommendations+for+the+management+of+acne+fulminans+and+its+variants>

BACKGROUND: Acne fulminans (AF) is a severe variant of inflammatory acne. It typically manifests as an explosive worsening and ulceration of skin lesions, and can be associated with systemic symptoms. However, there is a paucity of evidence-based information and no clear guidelines concerning the classification and treatment of AF. **OBJECTIVE:** To better define the spectrum of AF and its variants, devise optimal therapeutic approaches, and identify areas of future research. **METHODS:** A panel of physicians with expertise in severe acne vulgaris was

convened after a comprehensive literature review of severe acne variants. Priority topics were reviewed and presented by each panelist at a 5-hour conference. Following review of the audiotape and scribed notes from the conference, surveys were utilized to address points of controversy and to clarify consensus recommendations. RESULTS: c. LIMITATIONS: Limited evidenced-based data and prospective studies in the literature concerning the treatment of AF is available. CONCLUSION: These guidelines better characterize AF and provide health care practitioners approaches to the classification, treatment, and prevention of AF and its variants.

[Download Reference Document](#)

Topical Alpha-Agonist Therapy for Persistent Facial Erythema of Rosacea and the Addition of Oxmetazoline to the Treatment Armamentarium: Where Are We Now? by James Q. Del Rosso, DO, FAOCD, FAAD J Clin Aesthet Dermatol. 2017;10(7):28–32 <http://jcadonline.com/topical-alpha-agonist-therapy-for-persistent-facial-erythema-of-rosacea-and-the-addition-of-oxmetazoline-to-the-treatment-armamentarium-where-are-we-now/>

The presence of vasoactivity in rosacea-affected skin led to the development of two topical alpha-adrenergic receptor agonists, brimonidine tartrate 0.5% gel and oxymetazoline hydrochloride 1% cream, both approved by the United States Food and Drug Administration for treatment of persistent facial erythema of rosacea. In this article, the author discusses challenges related to the treatment of persistent facial erythema of rosacea and the use of alpha-agonist therapy. The author also discusses cases of worsening of facial erythema after the application of brimonidine, as well as briefly reviews recently reported clinical data on oxymetazoline. Finally, the author attempts to differentiate some potential mechanistic differences between these two agents.

[Download Reference Document](#)

Incidence of hidradenitis suppurativa in the United States: A sex- and age-adjusted population analysis.

Garg A, Lavian J, Lin G, et al. J Am Acad Dermatol. 2017 Jul;77(1):118-122. doi: 10.1016/j.jaad.2017.02.005. Epub 2017 Mar 9. <https://www.ncbi.nlm.nih.gov/pubmed/28285782>

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.

[Download Reference Document](#)

Management of hidradenitis suppurativa in pregnancy. Perng P, Zampella JG, Okoye GA. *J Am Acad Dermatol.* 2017 May;76(5):979-989. doi: 10.1016/j.jaad.2016.10.032. Epub 2016 Dec 29. <https://www.ncbi.nlm.nih.gov/pubmed/28040373>

Hidradenitis suppurativa is a debilitating inflammatory skin disease with a chronic course and often disappointing response to treatment. Though a minority of persons (20%) reports symptom remission during pregnancy, the vast majority experiences no relief (72%), and few experience clinical deterioration (8%). Disease flares are also observed post-partum. The pathophysiological basis for pregnancy-associated fluctuations in clinical status is currently unknown. Because most women with HS require ongoing management throughout pregnancy, it is important to evaluate the suitability and safety of current treatment options for pregnant women. The following review will outline current management strategies for HS and their compatibility with pregnancy and lactation.

[Download Reference Document](#)

Health-related quality of life in hidradenitis suppurativa. Ofenloch. DOI: 10.1111/bjd.15448. Linked Article: Janse et al. *Br J Dermatol* 2017; 176: 1042–1047. <http://onlinelibrary.wiley.com/wol1/doi/10.1111/bjd.15448/abstract>

Health-related quality of life (HRQOL) has become one of the most relevant patient-reported outcomes, especially for nonlife-threatening chronic diseases. Today not only the objective severity of a disease but also its (subjective) impact on the HRQOL of the patient often guides health-economic and clinical decisions. It is known that the objective physician's rating of disease severity is only poorly to moderately correlated with HRQOL as a subjective measure of disease impact. 1) It is widely accepted that the same disease with an identical degree of severity may have a different impact on HRQOL in different people. In most studies about HRQOL, differences were reported between men and women, indicating that HRQOL impairments in female patients are more severe. Hidradenitis suppurativa (HS), also known as acne inversa, is a chronic, recurrent, inflammatory disease with a 1-year prevalence estimated to be up to 1%. 2) It primarily affects skin that bears apocrine glands, and its clinical picture is characterized by painful, deep-seated, inflamed lesions, nodules and abscesses. 3) A clinical picture of severe HS located at the axilla can be seen in Figure 1. It has been reported that HS leads to HRQOL impairments that are in general more severe than in other skin diseases such as atopic dermatitis, psoriasis or chronic urticaria. 4) Nevertheless, the original work of Janse et al. 5) published in this issue of the BJD, gives special attention also to impairments in sexual health, adding to the current state of science. Assessing impairment in sexual health is logical, as HS is located at intimate body regions.

[Download Reference Document](#)

Hormonal therapies for acne. Barros B1, Thiboutot D2. *Clin Dermatol.* 2017 Mar - Apr;35(2):168-172. doi: 10.1016/j.clindermatol.2016.10.009. Epub 2016 Oct 27. <https://www.ncbi.nlm.nih.gov/pubmed/28274354>

Acne is a common, worldwide problem that is usually multifactorial in etiology, but androgens may play a pivotal role in the development and severity of acne. Endocrinopathies, such as polycystic ovarian syndrome, ovarian tumors, or adrenal hyperplasia or tumors, may be detected in some patients with acne, especially if acne is sudden in onset, associated with hirsutism or menstrual irregularities, or associated with cushingoid facies, acanthosis nigricans, patterned hair loss, or deepened voice. In these instances, serum-free and total testosterone, dehydroepiandrosterone, luteinizing hormone, and follicle stimulating hormone should be tested. Appropriate referral and long-term follow-up is warranted in patients diagnosed with an endocrinopathy. Hormonal therapies for acne include systemic medications with various mechanisms: androgen receptor blockers, adrenal androgen production blockers, or ovarian androgen production blockers. Androgen receptor blockers include spironolactone,

cyproterone acetate, chlormadinone, and flutamide; adrenal androgen production blockers include glucocorticoids; and ovarian production blockers include gonadotropin-releasing agonists and oral contraceptives. Practical guidelines are shared for the practicing physician treating hormonally related acne.

[Download Reference Document](#)

Chemical peels in active acne and acne scars. Kontochristopoulos G, Platsidaki E. Clin Dermatol. 2017 Mar - Apr;35(2):179-182. doi: 10.1016/j.clindermatol.2016.10.011. Epub 2016 Oct 27. <https://www.ncbi.nlm.nih.gov/pubmed/28274356>

Chemical peeling is a widely used procedure in the management of acne and acne scars. It causes controlled destruction of a part of or the entire epidermis, with or without the dermis, leading to exfoliation and removal of superficial lesions, followed by regeneration of new epidermal and dermal tissues. The most frequently used peeling agents are salicylic acid, glycolic acid, pyruvic acid, lactic acid, mandelic acid, Jessner solution, trichloroacetic acid, and phenol. The appropriate peel is chosen based on the patient's skin type, acne activity, and type of acne scars. Combination peels minimize side effects. In acne scars, chemical peels may be combined with other procedures to achieve better clinical results. A series of chemical peels can lead to significant improvement over a short period, leading to patient satisfaction and maintenance of clinical results.

[Download Reference Document](#)

Topical treatments for acne. Kosmadaki M, Katsambas A. Clin Dermatol. 2017 Mar - Apr;35(2):173-178. doi: 10.1016/j.clindermatol.2016.10.010. Epub 2016 Oct 27. <https://www.ncbi.nlm.nih.gov/pubmed/?term=Topical+treatments+for+acne+Kosmadaki>

Topical drugs have been used successfully to treat acne for decades. This review discusses the use, efficacy, and safety of options available via prescription. Topical antibiotics, dapsone, benzyl peroxide, azelaic acid, and topical retinoids are included. Topical antibiotics should not be used as monotherapy but rather be combined with other agents to avoid resistant *Propionibacterium acnes* strains. Benzoyl peroxide is effective in preventing bacteria resistance. Topical retinoids address primarily the comedonal but also the inflammatory lesions of acne. Azelaic acid is useful in treating acne lesions and for lightening postinflammatory hyperpigmentation that may accompany inflammatory acne lesions. Combinations of agents that address different aspects of acne pathogenesis may offer higher benefit to acne patients.

[Download Reference Document](#)

Taking steps to improve the assessment and management of rosacea. Drucker AM. Br J Dermatol. 2017 Feb;176(2):283-284. doi: 10.1111/bjd.15252. <https://www.ncbi.nlm.nih.gov/pubmed/28244097>

Updating the diagnosis, classification and assessment of rosacea: recommendations from the global ROSacea COnsensus (ROSCO) panel. [Br J Dermatol. 2017] Rosacea treatment update: recommendations from the global ROSacea COnsensus (ROSCO) panel. Rosacea is one of the most common inflammatory cutaneous conditions encountered in clinical practice. It can be very troubling for patients and significantly impact quality of life,^{1,2} and can be particularly disfiguring for those patients with phymatous change. Extracutaneously, ocular rosacea can lead to significant morbidity, and more recently, rosacea has been associated with a number of comorbidities including cardiovascular and autoimmune diseases.^{3,4} In 2005, it was estimated that the financial burden of rosacea in the U.S.A. was over \$2 billion, a number that has no doubt risen substantially. ⁵ Ensuring rosacea is diagnosed, assessed and managed appropriately is important at the patient and population level.

[Download Reference Document](#)

Patient Counseling/Communication

Generic Drugs—Changes in Cost and Challenges in Practice. Joslyn S. Kirby, MD, MS, MEd; Jeffrey J. Miller, MD, MBA. JAMA Dermatology 2017 August. <https://www.ncbi.nlm.nih.gov/pubmed/?term=28453656>

One of our patients is a woman in her 80s, on Medicare, who has newly diagnosed psoriasis, macular degeneration, and insulin dependent diabetes. Her current medication expenses account for 25% of her fixed monthly income of less than \$2500. She is in the “donut hole,” the point at which she pays a larger share of drug costs. The prescribed 60-g tube of generic clobetasol propionate, 0.05%, cream was \$447, and she was responsible for 51% of the cost. She decided to forego treatment because she could not afford the additional \$227 expense. We spent years learning to match the potency and vehicle of a topical steroid to our patients’ needs. But we need to develop another competency—improving our knowledge about the costs of our treatments. The cost of medication is important to each patient because multiple studies have shown that higher costs are associated with lower medication adherence, as in the case of this patient. We were taught to prescribe generic medication when available, rather than brand name medication, to give patients a similar outcome with a lower cost.

[Download Reference Document](#)

Clinical efficacy and safety of benzoyl peroxide for acne vulgaris: Comparison between Japanese and Western patients. Kawashima M, Nagare T, Doi M. J Dermatol. 2017 Aug 9. doi: 10.1111/1346-8138.13996. [Epub ahead of print] <http://onlinelibrary.wiley.com/doi/10.1111/1346-8138.13996/full>

Benzoyl peroxide (BPO) has been well established as a common medication for acne vulgaris in many countries (e.g. in Europe and the USA), where clinical data have been accumulated over a long time. In Japan, the use of BPO for acne treatment was approved in 2014, and the results of clinical trials in Japanese patients have recently been reported. This review compares clinical study results between Japanese and Western patients. Clinical

studies that had been performed in Western countries were searched on the basis of the criteria, double-blind studies of BPO monotherapy and comparison with a vehicle group. Two reports of Japanese studies were also selected by using the same criteria. Efficacy was assessed by comparing the mean difference between the BPO and the vehicle groups for reduction rate in the number of lesions from baseline, and there were no differences between Japanese and Western patients. Safety assessment also showed that the incidence of adverse events was higher in Japanese patients than in Western patients, but the characteristics of the adverse events were not different. Therefore, we conclude that there are no significant differences in the efficacy and safety of BPO between these patient populations. The efficacy and safety of long-term use in Japanese patients are also expected to be applicable to those in Western patients.

[Download Reference Document](#)

Teens, Acne, and Oral Contraceptive Pills The Need for Greater Clarity on When Teens Can Consent. Neuhaus CP, Nagler AR, Orlow SJ, JAMA Dermatol. 2017;153(4):249-250. doi:10.1001/jamadermatol.2016.5096 <http://jamanetwork.com/journals/jamadermatology/fullarticle/2596400>

Of the 3.2 million teenagers who use contraceptives, 53% use oral contraceptive pills (OCPs).¹ It is unclear who prescribes OCPs to this large population of teenagers. Anecdotal stories, blogs for teenagers, and acne treatment literature confirm that dermatologists are among prescribers of OCPs for teens. Four OCPs have been approved by

the US Food and Drug Administration (FDA) for the management of acne.² Some dermatologists are uncomfortable prescribing OCPs to young patients, however, and refer them to primary care physicians or gynecologists for OCP prescriptions, even when OCPs are indicated for acne. Dermatologists' reluctance to prescribe is likely multifactorial including OCPs' "primary" indication for the prevention of pregnancy and the requirement for a conversation about sexual activity when prescribing OCPs. Additionally, dermatologists face ambiguities in consent laws governing minors specifically with respect to OCPs. In many states, due to the role of OCPs in sexual health, their prescription to minors does not require parental consent. Dermatologists need clarity on whether they can prescribe OCPs to minors absent parental consent.

[Download Reference Document](#)

The Use of Cosmeceuticals in Acne: Help or Hoax? Barros BS, Zaenglein AL. *Am J Clin Dermatol.* 2017 Apr;18(2):159-163. doi: 10.1007/s40257-016-0249-6. <https://www.ncbi.nlm.nih.gov/pubmed/28063095>

The use of cosmeceuticals by patients with acne is common; however, their role is unclear and confusing, with many asking, "Do they really help acne?" Cosmeceuticals are intermediate products between prescription medications and cosmetics, available to consumers over the counter. These products are popular and may be used without the direct supervision of a dermatologist, creating a practice gap in educating patients. Herein, a variety of cosmeceuticals are discussed, including retinoids, niacinamide, and glycolic acid. The evidence for and against cosmeceutical use in patients with acne is reviewed.

[Download Reference Document](#)