AARS HOT TOPICS MEMBER NEWSLETTER

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AARS Events

April is Rosacea Awareness Month!

Check out our website and social media postings this month for new video stories from rosacea patients! Stay tuned for more Rosacea Awareness Month news, including our new upcoming peer-reviewed publication 'Updated on the Management of Rosacea from the American Acne & Rosacea Society' to be featured in the *Journal of Clinical and Aesthetic Dermatology*.

Register Now for the 8th Annual AARS Scientific Symposium at the Society for Investigative Dermatology to be held on Wednesday, May 8, 2019 in Chicago!

This will feature acne, HS, and rosacea presentations during a luncheon symposium on Wednesday, May 8, 2019 from 10:00 AM – 2:00 PM at the Hilton Chicago in the Waldorf Room, 3rd floor. Join AARS Scientific Symposium Co-Chairs Mark Jackson, AARS President and Diane Thiboutot, AARS Past President for fascinating talks and a chance to meet new and old friends in acne and rosacea research! This is free to all SID attendees and AARS members. Register Here!

Industry News

Biofrontera acquires Cutanea Life Sciences. DermWire, Practical Dermatology. Monday, March 25, 2019. http://practicaldermatology.com/dermwire/2019/03/25/biofrontera-acquires-cutanea-life-sciences

Biofrontera Inc., USA entered into an agreement to acquire all shares in Cutanea Life Sciences, Inc., USA through its subsidiary Biofrontera Newderm LLC as the acquirer, with Maruho Co., Ltd., Japan as the seller. Maruho holds approximately 20 percent of Biofrontera AG. Cutanea is a US-based pharmaceutical company that markets Aktipak, a prescription gel for the treatment of acne. In November 2018, Cutanea also launched Xepi, a prescription cream for the treatment of impetigo. XepiTM is the only drug in its class FDA approved with activity against antibiotic-resistant bacteria (MRSA). The aim of the acquisition of Cutanea by Biofrontera is to effectively exploit the sales potential of Aktipak and Xepi in the USA. Any rights in Cutanea's existing research and development activities originated from Maruho will remain with Maruho. Any other rights in Cutanea's other research and development activities will be transferred to Maruho during a transition time. Maruho will provide up to $7.3 million to start financing the commercialization of the two new drugs in Biofrontera's portfolio. Maruho will also indemnify Biofrontera and Cutanea, respectively, from all existing liabilities and will bear any costs of the operational business of Cutanea in the first three months after the acquisition. Biofrontera will use its experience and expertise as well as its sales structure already successfully operating in the USA for the future successful marketing of Aktipak and Xepi. Biofrontera acquires Cutanea for an initial purchase price of $1.00. The profits from the sale of Aktipak and Xepi, shown after deduction of all costs, will in the future be split between Maruho and Biofrontera, whereby Biofrontera guarantees Maruho as a further purchase price payment until December 31, 2023 a sum in the amount of the start-up costs. Thereafter, profits will be distributed equally.

Are skin diseases more common than previously held? DermWire, Practical Dermatology. Wednesday, March 20, 2019. http://practicaldermatology.com/dermwire/2019/03/20/are-skin-diseases-more-common-than-previously-held

Skin diseases may be more common than previously believed, according to a new study in the Journal of the European Academy of Dermatology and Venereology that estimates the prevalence of skin diseases outside of the typical medical setting. Skin diseases are ranked as the fourth most common cause of human illness, but many affected people do not consult a physician. To include people who never or rarely seek medical aid, researchers collected data at the Munich Oktoberfest in Germany where screening examinations were performed randomly on participating visitors. Of the 2,701 individuals in the study, at least one skin abnormality was observed in 1,662 of the participants (64.5 percent). The most common diagnoses were actinic keratosis (26.6 percent), rosacea (25.5 percent), and eczema (11.7 percent). Skin diseases increased with age and were more frequent in men (72.3 percent) than in women (58.0 percent). Nearly two-thirds of the affected participants were unaware of their abnormal skin findings, the study found. "Skin diseases might be even more prevalent than previously thought. Considering their significant impact on individual, family, and social life as well as their heavy economic burden caused by inadequate self- or non-physician treatment, the public health importance of skin diseases is underappreciated," says senior author Dr. Alexander Zink, of the Technical University of Munich, in a news release. "Information and awareness campaigns are needed to better address this neglected issue and to reduce the global burden of skin diseases."

New Medical Research

Comparative effectiveness of purpuragenic 595 nm pulsed dye laser versus sequential emission of 595 nm pulsed dye laser and 1,064 nm Nd:YAG laser: a double-blind randomized controlled study. Campos MA, Sousa AC, Varela P, et al. Acta Dermatovenerol Alp Pannonica Adriat. 2019 Mar;28(1):1-5.
https://www.ncbi.nlm.nih.gov/pubmed/30901061

Introduction: Erythematotelangiectatic rosacea is a common condition in Caucasians. The most frequently used lasers to treat this condition are pulsed dye laser (PDL) and neodymium:yttrium-aluminum-garnet laser (Nd:YAG). This study compares the treatment efficacy of purpuragenic PDL with that of sequential emission of 595 nm PDL and 1,064 nm Nd:YAG (multiplexed PDL/Nd:YAG). Methods: We performed a prospective, randomized, and controlled split-face study. Both cheeks were treated, with side randomization to receive treatment with PDL or multiplexed PDL/Nd:YAG. Efficacy was evaluated by spectrophotometric measurement, visual photograph evaluation, the Dermatology Quality of Life Index questionnaire, and a post-treatment questionnaire. Results: Twenty-seven patients completed the study. Treatment was associated with a statistically significant improvement in quality of life ($p < 0.001$). PDL and multiplexed PDL/Nd:YAG modalities significantly reduced the erythema index (EI; $p < 0.05$). When comparing the degree of EI reduction, no differences were observed between the two treatment modalities. PDL was associated with a higher degree of pain and a higher percentage of purpura. Multiplexed PDL/Nd:YAG modality was associated with fewer side effects and greater global satisfaction, and 96.3% of the patients would recommend this treatment to a friend. Conclusions: Both laser modalities are efficacious in the treatment of erythematotelangiectatic rosacea. The multiplexed PDL/Nd:YAG modality was preferred by the patients.

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Adalimumab medium-term dosing strategy in moderate-to-severe hidradenitis suppurativa: integrated results from the Phase 3, randomized, placebo-controlled, PIONEER trials. Jemec GBE, Okun MM, Forman SB, et al. Br J Dermatol. 2019 Mar 27. doi: 10.1111/bjd.17919. [Epub ahead of print]
https://www.ncbi.nlm.nih.gov/pubmed/30916379

Background: Weekly adalimumab (Humira®) is approved for treatment of hidradenitis suppurativa (HS) based on the 12-week, placebo-controlled periods of the two, phase-3 PIONEER trials. Objectives: From PIONEER integrated trial results, we evaluated the optimal medium-term adalimumab maintenance dosing strategy in moderate-to-severe HS. Methods: Each trial had two double-blind periods; 12-week Period A and 24-week Period B. Patients randomized to adalimumab 40 mg every-week (ADAew) (Period A), were re-randomized in Period B to ADAew (ADAew/ew), ADA every-other-week (ADAew/eow), or placebo (ADAew/pbo). Placebo-randomized patients were reassigned in Period B to ADAew (PIONEER I) or placebo (PIONEER II). The primary outcome was Hidradenitis Suppurativa Clinical Response (HiSCR: ≥50% reduction from baseline in total abscess and inflammatory nodule count [AN], with no increase in abscess or draining-fistula counts). Patients who lost response during Period B were discontinued from the study and offered an option to enter the open-label extension (OLE) to receive ADAew. Results are reported across the 2 study periods, and data were combined from the 2 study periods and the OLE. Results: For week-12 HiSCR achievers, the HiSCR week-36 rate was 48·1% (ADAew/ew) versus 46·2% (ADAew/eow) and 32·1% (ADAew/pbo). Combining (post hoc) these patients with week-12 partial responders (≥25% reduction in AN count relative to baseline) further differentiated outcomes in Period B (ADAew/ew 55·7%, versus ADA ew/eow 40·0% and ADAew/pbo 30·1%). Period-B adverse-event rates were ADAew/ew 59·6% versus ADAew/eow 57·4% and ADA/pbo 65·0%. One patient (ADAew/ew) reported a serious infection. Conclusions: For this population weekly adalimumab treatment, effective throughout 36 weeks, was the optimal maintenance medium-term dosing regimen. At least partial response after 12 weeks with continued weekly dosing, had better outcomes than dose reduction or interruption, with no notable differences in safety profile. Patients who do not show at least a partial response (AN count of at least 25%) to weekly adalimumab by week 12 are unlikely to benefit from continued therapy. No new safety risks were identified with weekly adalimumab treatment through 36 weeks.

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Effects of intradermal radiofrequency treatment and intense pulsed light therapy in an acne-induced rabbit ear model. Seok J, Kim JH, Kim JM, et al. Sci Rep. 2019 Mar 25;9(1):5056. doi: 10.1038/s41598-019-41322-x.
https://www.ncbi.nlm.nih.gov/pubmed/30911021

Acne vulgaris is a common condition that can have psychologically deleterious effects. Since current treatments carry the risks of antibiotic resistance or teratogenicity, novel treatment modalities are under investigation. Our study investigated the efficacy of intradermal radiofrequency treatment (RF) and intense pulsed light (IPL) in the treatment of acne vulgaris in a rabbit ear model. We evaluated the effectiveness of IPL, RF, and a combination treatment on cultured Cuticobacterium acnes strains in an induced rabbit ear model, according to clinical outcomes as well as histological and immunological approaches. We found that RF treatment markedly decreases papule volume, while IPL appears to have an immunomodulatory effect. In combination, the two have an additive effect in treatment. These findings suggest that combination of RF and IPL may be an effective therapeutic option for the treatment of acne vulgaris.

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Matrix remodeling and MMP expression/activation is associated with hidradenitis suppurativa skin inflammation. Sanchez J, Le Jan S, Muller C, et al. Exp Dermatol. 2019 Mar 23. doi: 10.1111/exd.13919. [Epub ahead of print] https://www.ncbi.nlm.nih.gov/pubmed/30903721

Hidradenitis suppurativa/acne inversa (HS) is a chronic, inflammatory, recurrent, debilitating skin disease of the hair follicle, associated with considerable tissue remodeling. Although abnormal cytokines expression was detected both in perilesional and in uninvolved skin, up to now there is no model allowing a better understanding of the implicit inflammatory mechanisms in HS. The aim of this study was to investigate the inflammatory response in HS skin by mean of an ex vivo model culture. To that purpose, 9 skin biopsy specimens from patients suffering from HS and controls were cultured up to 4 days. Microscopy imaging investigations showed variations of collagen I and III organization, and an increase in elastin fibers fragmentation in HS skin after 4 days of culture. The HS matrix structure remodeling was associated with high level of MMP-2 and MMP-9 in HS lesional skin. After 4 days of culture, the MMPs expression in HS perilesional skin reached the level observed in HS lesional skin. Concomitantly, an increase in IL-1β concentration was observed in all skin samples after 4 days of culture, although IL-1β concentrations remained significantly higher in HS lesional skin as compared with control skin. Meanwhile, neither IL-17 concentrations nor the inflammasome components NLRP3 and CASPase-1 varied. Thus, our HS skin model culture showed that MMP-induced matrix alteration could participate to HS inflammation by releasing biological active peptides and inflammatory factors from the extracellular matrix (ECM), and open new opportunities to investigate the regulation of the inflammatory mechanism associated with HS.

Validation of a hidradenitis suppurativa self-assessment tool. Senthilnathan A, Kolli SS, Cardwell LA, et al. J Cutan Med Surg. 2019 Mar 22:1203475419839965. doi: 10.1177/1203475419839965. [Epub ahead of print] https://www.ncbi.nlm.nih.gov/pubmed/30897946

Background: Hidradenitis suppurativa (HS) is a debilitating dermatologic condition presenting with recurrent abscesses. While there are multiple scales to determine HS severity, none are designed for self-administration. A validated severity self-assessment tool may facilitate survey research and improve communication by allowing patients to objectively report their HS severity between clinic visits. Objectives: The purpose of this study was to assess a self-administered HS measure. Methods: An HS self-assessment tool (HSSA) with 10 photographs of different Hurley stages was developed. The tool was administered to patients diagnosed with HS who visited the Wake Forest Baptist Health dermatology clinic over a span of 2 months. Physician-administered Hurley stage was recorded to determine criterion validity. To assess test-retest reliability of the measure, patients completed the HSSA again at least 30 minutes after the first completion. Results: Twenty-four patients completed the measure, and 20 of these patients completed it twice. Agreement between physician-determined Hurley stage and self-determined Hurley stage was 66.7% with a weighted kappa of 0.57 (95% confidence interval [CI]: 0.30-0.84). The weighted kappa for agreement between patients' initial and second completion of the HSSA was 0.81 (95% CI: 0.64-0.99). Conclusions: The self-administered measure provides moderate agreement with physician-determined Hurley stage and good test-retest reliability.

Adapalene-loaded poly(ε-caprolactone) microparticles: physicochemical characterization and in vitro penetration by photoacoustic spectroscopy. Nadal JM, Dos Anjos Camargo G, Novatski A, et al. PLoS One. 2019 Mar 21;14(3):e0213625. doi: 10.1371/journal.pone.0213625. eCollection 2019.
https://www.ncbi.nlm.nih.gov/pubmed/30897170

Adapalene (ADAP) is an important drug widely used in the topical treatment of acne. It is a third-generation retinoid and provides keratolytic, anti-inflammatory, and antiseborrheic action. However, some topical adverse effects such as erythema, dryness, and scaling have been reported with its commercial formula. In this sense, the

microencapsulation of this drug using polyesters can circumvent its topical side effects and can lead to the enhancement of drug delivery into sebaceous glands. The goal of this work was to obtain ADAP-loaded poly(ε-caprolactone) (PCL) microparticles prepared by a simple emulsion/solvent evaporation method. Formulations containing 10 and 20% of ADAP were successfully obtained and characterized by morphological, spectroscopic, and thermal studies. Microparticles presented encapsulation efficiency of ADAP above 98% and showed a smooth surface and spherical shape. Fourier transform infrared spectroscopy (FTIR) results presented no drug-polymer chemical bond, and a differential scanning calorimetry (DSC) technique showed a partial amorphization of the drug. ADAP permeation in the Strat-M membrane for transdermal diffusion testing was evaluated by photoacoustic spectroscopy (PAS) in the spectral region between 225 and 400 nm after 15 min and 3 h from the application of ADAP-loaded PCL formulations. PAS was successfully used for investigating the penetration of polymeric microparticles. In addition, microencapsulation decreased the in vitro transmembrane diffusion of ADAP.
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Effectiveness of subcision using carboxytherapy plus fractional carbon dioxide laser resurfacing in the treatment of atrophic acne scars: comparative split face study. Abdel Kareem IM, Fouad MA, Ibrahim MK. J Dermatolog Treat. 2019 Mar 19:1-14. doi: 10.1080/09546634.2019.1595505. [Epub ahead of print] https://www.ncbi.nlm.nih.gov/pubmed/30889369
Introduction: fractional carbon dioxide laser resurfacing is the gold standard treatment for atrophic acne scars but when combined with subcision to the depressed scars it provides rapid improvement. Carboxytherapy is considered a tool for subcision via injecting the gas under pressure plus its well-known effect in rejuvenating scars. Aim of the work: is to evaluate the effectiveness of combined subcision using carboxytherapy plus fractional carbon dioxide laser resurfacing in the treatment of atrophic acne scars. Patients and method: twenty patients with atrophic acne scars undergone three sessions of fractional carbon dioxide laser resurfacing for both sides of the face and subcision by CO2 gas for the right-side scars only. Standardized photographs were taken before and three months after the last session and evaluated by two independent blinded dermatologists for the degree of improvement. Result: the right side of the face improved better than the left side and showed excellent improvement in 10% of cases that was statistically significant (p value =0.003). Conclusion: subcision via carboxytherapy accelerate the improvement of atrophic acne scars when combined with fractional carbon dioxide laser resurfacing.

Radiofrequency therapy and noncosmetic cutaneous conditions. Ekelem C, Thomas L, Van Hal M, et al. Dermatol Surg. 2019 Mar 18. doi: 10.1097/DSS.0000000000001925. [Epub ahead of print]
https://www.ncbi.nlm.nih.gov/pubmed/30893163
Background: The need for noninvasive methods in treatment of cutaneous disease has continued to evolve exponentially. Amidst the search for technologies, radiofrequency (RF) has proven efficacious in numerous skin disease processes. Although RF is well known for its cosmetic utility, its mechanism is valued in the treatment of many noncosmetic cutaneous conditions of various etiologies. Objective: To identify and describe studies in which RF was used to treat noncosmetic skin conditions and to explore the potential of this modality for further application in dermatologic diseases. Materials and methods: The PubMed database was used to find relevant articles. Results: This search strategy yielded 54 articles that met the eligibility criteria. Noncosmetic indications discussed in these articles include varicose veins (n = 10,550), lymphangioma circumscriptum (n = 72), cutaneous neoplasms (n = 42), cutaneous leishmaniasis (n = 743), acne and acne scarring (n = 158), non-acne scarring (n = 43), primary axillary hyperhidrosis (n = 76), and acute and chronic wounds (n = 94). Conclusion: Treatment with RF is an effective, generally noninvasive modality with a relatively short postprocedure recovery time and little potential for severe

adverse effects in the treatment of several cutaneous conditions. Further clinical studies would prove useful to assess the efficacy and cost-effectiveness of this treatment.

Perceptions about oral isotretinoin treatment. Tugrul Ayanoglu B, Demirdag HG, Yalici Armagan B, Bezirgan O. Dermatol Ther. 2019 Mar 13:e12873. doi: 10.1111/dth.12873. [Epub ahead of print]
https://www.ncbi.nlm.nih.gov/pubmed/30868702
There are some studies on the knowledge, beliefs, and perceptions of patients about acne vulgaris, however, there is no sufficient data on patients' beliefs about oral isotretinoin treatment (OIT). The aim of this study was to assess the knowledge, beliefs, and perceptions of the patients with acne vulgaris about the therapy of OIT and its side effects. A total of 214 patients with acne vulgaris in our outpatient clinic were included. Patients who were planned to treat with OIT were asked whether they had information about the treatment and its side effects. It was noted whether the patients accepted treatment after being informed both verbally and written about the OIT details. The study consisted of 133 female and 81 male aged 12-57 years. Most of the patients (78%) stated that they had heard of OIT. The most common source of the information on isotretinoin therapy was friends (57.6%). The dryness was the best-known side effect. While 86.4% of patients (n: 185) accepted OIT, the group (14.4%) stated that "I have knowledge about side effects." and refused to use the treatment. Most of the patients agreed to the treatment after explanation of dermatologist. Patients may be educated and informed via reliable medical sources to prevent bias and improve compliance to the treatment.
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Clinical Reviews

Research techniques made simple: profiling the skin microbiota. Grogan MD, Bartow-McKenney C, Flowers L, et al. J Invest Dermatol. 2019 Apr;139(4):747-752.e1. doi: 10.1016/j.jid.2019.01.024.
https://www.ncbi.nlm.nih.gov/pubmed/30904077
Skin is colonized by microbial communities (microbiota) that participate in immune homeostasis, development and maintenance of barrier function, and protection from pathogens. The past decade has been marked by an increased interest in the skin microbiota and its role in cutaneous health and disease, in part due to advances in next-generation sequencing platforms that enable high-throughput, culture-independent detection of bacteria, fungi, and viruses. Various approaches, including bacterial 16S ribosomal RNA gene sequencing and metagenomic shotgun sequencing, have been applied to profile microbial communities colonizing healthy skin and diseased skin including atopic dermatitis, psoriasis, and acne, among others. Here, we provide an overview of culture-dependent and -independent approaches to profiling the skin microbiota and the types of questions that may be answered by each approach. We additionally highlight important study design considerations, selection of controls, interpretation of results, and limitations and challenges.
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Even mild hidradenitis suppurativa impairs quality of life. Senthilnathan A, Kolli SS, Cardwell LA, et al. Br J Dermatol. 2019 Mar 27. doi: 10.1111/bjd.17928. [Epub ahead of print]
https://www.ncbi.nlm.nih.gov/pubmed/30916383
Hidradenitis suppurativa (HS) is a chronic, inflammatory condition characterized by recurrent abscesses and scarring. The pain, malodorous discharge and cosmetic aspects of the lesions in HS can impair quality of life. The Dermatology Life Quality Index (DLQI) is a validated and reliable measure that assesses the impact of skin disease on quality of

life (QoL).1 We assessed QoL in HS patients using this tool, examined the effect of disease severity (as measured by Hurley stage) on QoL and compared HS DLQI scores with DLQI scores of atopic dermatitis and psoriasis populations.
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Differences in isotretinoin start, interruption, and early termination across race and sex in the iPLEDGE era. Charrow A, Xia FD, Lu J, et al. PLoS One. 2019 Mar 26;14(3):e0210445. doi: 10.1371/journal.pone.0210445. eCollection 2019. https://www.ncbi.nlm.nih.gov/pubmed/30913210
Background: iPLEDGE is the mandatory regulatory program for isotretinoin in the United States, aimed to prevent isotretinoin-related teratogenicity. However, little is known about potential unintended impact of the program, including delay in isotretinoin initiation, course interruption, and premature termination, which may vary across sex and racial domains. Objective: To determine whether differences in isotretinoin start, interruption, and completion exist across sex and racial domains and whether iPLEDGE regulations contribute to such differences. Methods: Retrospective review of isotretinoin courses of patients prescribed isotretinoin for acne at the Brigham & Women's Hospital and Massachusetts General Hospital from 2008-2016. Results: 418 patients were included in analysis after being tightly matched across age and gender. 43.5% of non-white patients ended their course early compared to 30.1% of white patients (p = 0.010). iPLEDGE -related barriers were the most commonly specified reasons for delayed starting and interruption. Conclusion: iPLEDGE may disproportionately contribute to access barriers for non-white patients. Continued evaluation of iPLEDGE is needed to minimize unintended barriers to access.
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Depression and the dermatologist: a critical analysis of contemporary isotretinoin prescribing practices. Daunton A, Oyebode F, Goulding JMR. Clin Exp Dermatol. 2019 Mar 26. doi: 10.1111/ced.13971. [Epub ahead of print] https://www.ncbi.nlm.nih.gov/pubmed/30912853
The management of patients with current or previous depression who require isotretinoin treatment for acne is a challenging area. Current opinion favors the view that isotretinoin-induced mood disturbance is a rare, idiosyncratic reaction, not reliably related to the presence of pre-existing depression. Nonetheless, in the absence of a definitive high-quality study, there remains a degree of legitimate uncertainty. With input from a psychiatrist, we created and administered a detailed survey featuring a range of low, medium and higher-risk clinical scenarios, designed to capture a snapshot of current dermatological practice. Respondents indicated a wide variability in their approach, with a substantial proportion referring on to psychiatry where this was not deemed necessary. Few dermatologists appreciated the importance of behaviors suggesting impaired impulse control. We hope this study helps to refine guidance for isotretinoin prescribing, both to maximize safety, and to ensure deserving patients with acne do not miss out on appropriate treatment.

Metformin use in hidradenitis suppurativa. Jennings L, Hambly R, Hughes R, et al. J Dermatolog Treat. 2019 Mar 20:1-3. doi: 10.1080/09546634.2019.1592100. [Epub ahead of print]
https://www.ncbi.nlm.nih.gov/pubmed/30893570
Background: Hidradenitis suppurativa (HS) is a chronic debilitating inflammatory disease, associated with metabolic syndrome, obesity and insulin resistance. Metformin, an oral hypoglycaemic agent, may play an important role in delaying or preventing the onset of diabetes and metabolic syndrome. Metformin has been reported as having efficacy in HS. It may have a role in the treatment of HS and its associated co-morbidities. Objective: To evaluate metformin use, response and tolerability in a HS population. Methods: A retrospective chart review of patients attending a specialist Dermatology HS clinic over 12 months. All patients treated with metformin were included. Results: Fifty-

three HS patients received metformin; 85% female; mean age was 37 years and mean weight was 102 kg. The mean duration of metformin was 11.3 months and mean dose was 1.5 g/days. The 6- and 12-month drug survival were 61% and 39%, respectively. Metformin was well tolerated. Gastrointestinal side effects were experienced by 11%. Subjective clinical response was seen in 68% (n = 36) with 19% (7/36) of these having quiescent disease with metformin monotherapy. 25% had no improvement. Insulin resistance was seen in 75%. Its presence did not predict clinical response to metformin. Conclusion: Metformin is an effective, well tolerated and inexpensive treatment that represents a viable treatment option for HS. Key message: Metformin is an effective; well tolerated and inexpensive treatment in the management of HS.

Defining fistular patterns in hidradenitis suppurativa: impact in the management. Martorell A, Giovanardi G, Gomez-Palencia P, Sanz-Motilva V. Dermatol Surg. 2019 Mar 18. doi: 10.1097/DSS.0000000000001916. [Epub ahead of print] https://www.ncbi.nlm.nih.gov/pubmed/30893168

Background: Recent studies suggest that there are different fistular subtypes in hidradenitis suppurativa (HS) patients who are associated with variable therapeutic outcomes. Objective: To describe clinical and ultrasound features that characterize the different fistular patterns in HS and to evaluate the response to medical therapies. Methods: A retrospective study developed by a well-recognized center specialized in HS analyzing both clinical and ultrasound (US) aspects of fistular structures in HS patients was performed. Medical therapy response was evaluated through follow-up visits at Week 24. Results: A total of 117 fistulas detected in the skin of 40 patients were evaluated. Four different types of fistulas were described: dermal fistula (Type A), dermoepidermal fistula (Type B), complex fistula (Type C), and subcutaneous fistula (Type D). Fistulas Type A and B showed a complete resolution after 6 months of different medical therapies in up to 95% and 65% of cases, respectively. Contrary to this, fistulas Type C and D showed no significant response after a medical intervention. Conclusion: The US evaluation seems to play an important role to define these important structures that will help the clinician in elaborating a personalized combined medical and surgical management of the HS patient.

North American clinical management guidelines for hidradenitis suppurativa: a publication from the United States and Canadian Hidradenitis Suppurativa Foundations. Part I: diagnosis, evaluation, and the use of complementary and procedural management. Alikhan A, Sayed C, Alavi A, et al. J Am Acad Dermatol. 2019 Mar 11. pii: S0190-9622(19)30367-6. doi: 10.1016/j.jaad.2019.02.067. [Epub ahead of print]
https://www.ncbi.nlm.nih.gov/pubmed/30872156

Hidradenitis suppurativa is a chronic inflammatory disorder affecting hair follicles with profoundly negative impact on patient quality of life. Evidence informing ideal evaluation and management of patients with hidradenitis suppurativa is still sparse in many areas but has grown substantially in the last decade. Part I of this evidence-based guideline is presented to support health care practitioners as they select optimal management strategies including diagnostic testing, comorbidity screening, and both complementary and procedural treatment options. Recommendations and evidence grading based on the evidence available at the time of the review are provided.

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The role of topical retinoids in prevention and treatment of atrophic acne scarring: understanding the importance of early effective treatment. Tan J, Tanghetti E, Baldwin H, et al. J Drugs Dermatol. 2019 Mar 1;18(3):255-260. https://www.ncbi.nlm.nih.gov/pubmed/30909329

Atrophic acne scarring is a frequent occurrence among acne patients. These facial marks are often very emotionally distressing for the patient and can result in adverse impact to quality of life. While most clinicians consider scarring as a sequela of moderate to severe acne, recent studies have found that scars are also associated with mild acne.

Risk factors include time to effective treatment, severity of acne, family history, and excoriations. New data shows that early and effective acne treatment can reduce the development of new scars, confirming the widespread perception of this approach in prevention. It is also becoming clear that the inflammatory process drives both the development of acne lesions and atrophic scars. This implies that inhibiting activation of inflammatory pathways early is key to preventing scars. Data also suggests a useful role for adapalene for the treatment of well-established acne scars with scar remodeling accompanied by the production of new collagen and elastic tissue. Acne guidelines and recommendations continue to highlight the central role of retinoids, with fixed-dose combination retinoids being particularly important due to targeting of multiple inflammatory pathophysiologic factors and for patient convenience. Higher concentrations of retinoids such as adapalene 0.3%/benzoyl peroxide 2.5% (A0.3/BPO2.5) have shown increased efficacy, particularly among patients with moderately severe and severe acne – a population at high risk for scarring. Further, controlled study of A0.3/BPO2.5 in patients with moderate acne (mean, 40 acne lesions per half face) and mild-moderate scarring demonstrated A0.3/BPO2.5 was significantly superior to vehicle in reducing scar counts from baseline over 24 weeks. While scar counts lessened on the A0.3/BPO2.5 side, counts increased on the vehicle side during the study. This occurred in the setting of active acne, where the efficacy of A/BPO is well known, emphasizing the dual actions of A0.3/BPO2.5 in both treatment and prevention.
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Acne and rosacea: special considerations in the treatment of patients with Latin American ancestry. Florez-White M. J Drugs Dermatol. 2019 Mar 1;18(3):s124-126. https://www.ncbi.nlm.nih.gov/pubmed/30909359
Acne is a common disease among patients with Latin American ancestry. Its presentation is very similar to that in all skin types, but nodulocystic acne is more frequent in patients with oily and darker skin than in white Caucasians. Acne sequelae in patients with Latin American ancestry and with darker skin include postinflammatory hyperpigmentation (PIH) and atrophic and hypertrophic scars or keloids, with PIH being the most common complication affecting the quality of life of patients. Lately, more attention has been paid to rosacea in patients with darker skin. It has been seen that some of the patients, especially women, diagnosed with adult acne and who did not respond to treatment, were actually patients with rosacea. It is important to recognize the clinical characteristics of this disease in patients with darker skin in whom erythema and telangiectasia are difficult to observe. Here, we present the most relevant clinical characteristics of both diseases, as well as their treatment in patients with darker skin with Latin American ancestry.
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Treating acne with topical antibiotics: current obstacles and the introduction of topical minocycline as a new treatment option. Bonati LM, Dover JS. J Drugs Dermatol. 2019 Mar 1;18(3):240-244.
https://www.ncbi.nlm.nih.gov/pubmed/30909327
Oral antibiotics are well established treatments for acne vulgaris but are associated with undesirable side effects. Topical antibiotics offer an improved safety profile but have led to an alarming rise in worldwide P. acnes resistance. Fortunately, a new class of topical minocycline products has been developed for the treatment of acne and rosacea that decreases the risk for antibiotic resistance while maintaining safety and efficacy. Recent clinical studies have demonstrated that a hydrophilic minocycline gel (BPX-01) and a lipophilic minocycline foam (FMX101) both reduced acne lesion counts with negligible systemic absorption. Head-to-head studies have yet to be completed, but the hydrophilic gel studies reported greater treatment efficacy than the lipophilic foam studies.
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