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## DERMATOLOGY UPDATE 7: Winter 2018



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Welcome to the latest copy of this Update. The aims of this publication are:

- ❖ To bring together a range of recently-published research reports, articles and electronic resources to help all staff keep up-to-date with research and practice.
- ❖ To remind readers of the services available from the Library and Knowledge Service – we can supply you with 1:1 or small group training in evidence searching skills; obtain full-text articles for you; or provide you with an evidence search service to help you with your evidence based practice, patient care, decision making and research.
- ❖ To respond to your information needs – if you have any suggestions on the type of information sources you would find helpful in future editions of the Update, then please let us know.

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The following abstracts are taken from a selection of recently published articles.

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– December 2018

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## Miscellaneous

### 1. Evaluation of Antibiotic Treatment on the Duration of Hospitalization of Patients with Erysipelas and Bacterial Cellulitis.

**Author(s):** Kosior, Ewelina; Reich, Adam

**Source:** Dermatology and therapy; Dec 2018

**Publication Date:** Dec 2018

**Publication Type(s):** Journal Article

**PubMedID:** 30535927

Available at [Dermatology and therapy](#) - from Europe PubMed Central - Open Access

**Abstract:**INTRODUCTIONErysipelas and bacterial cellulitis are two of the most common infectious skin diseases. They are usually caused by the  $\beta$ -hemolytic group of Streptococcus, and less frequently by other bacteria. The objective of the study was to assess the factors affecting the length of stay of patients admitted to hospital with erysipelas or bacterial cellulitis.METHODSThe study was based on the retrospective analysis of medical records of patients diagnosed with erysipelas or bacterial cellulitis. Selected clinical features of the disease, the results of additional tests, the treatment used, and the time of hospitalization were analyzed. Among an initial group of 78 pre-identified patients, 59 subjects aged from 32 to 89 years were included in the final analysis. The time spent in the hospital and the number of antibiotics necessary to cure the patient were chosen as the parameters of treatment efficacy.RESULTSThe average duration of stay in a hospital was  $7.0 \pm 2.9$  days and was slightly longer for women than for men. Patients with chills on admission, with coexisting chronic venous insufficiency of the lower limbs, and with anemia were hospitalized for a significantly longer period than those without these conditions. A combination therapeutic regimen of amoxicillin + clavulanic acid was the most commonly used treatment option, and this therapy was linked with shortest duration of stay in the hospital; the length of hospital stay was significantly longer for those patients receiving cephalosporins or clindamycin as treatment. The combination therapy of amoxicillin + clavulanic acid as treatment option was also least often associated with the need to use other antibacterial agents.CONCLUSIONSBased on our evaluation of 59 subjects with either erysipelas or bacterial cellulitis, combination therapy with amoxicillin + clavulanic acid appears to be linked with the shortest stay in the hospital. We suggest that this combination therapy should be considered as a first-line treatment for patients hospitalized due to erysipelas or bacterial cellulitis, if other factors did not preclude the use of this therapy.

**Database:** Medline

### 2. Dermatological conditions presenting to the emergency dermatological unit of a university hospital in Germany.

**Author(s):** Ansorge, Claudia; Miocic, Johannes M; von Bubnoff, Dagmar; Technau-Hafsi, Kristin

**Source:** Journal der Deutschen Dermatologischen Gesellschaft = Journal of the German Society of Dermatology : JDDG; Dec 2018; vol. 16 (no. 12); p. 1451-1456

**Publication Date:** Dec 2018

**Publication Type(s):** Journal Article

**PubMedID:** 30417531

Available at [Journal der Deutschen Dermatologischen Gesellschaft = Journal of the German Society of Dermatology : JDDG](#) - from Wiley

**Abstract:**BACKGROUND AND OBJECTIVESRecently, there have been increasing numbers of patients consulting emergency units in all medical disciplines. Our aim was to analyze the demographics, referral mode, symptoms, localization of lesions, prior treatment, diagnoses and hospitalization rate of dermatological patients.PATIENT AND METHODSThe study was conducted as a prospective single center survey over six months in the dermatology unit of a university hospital in Germany. 1552 consultations were included with consecutive sampling.RESULTSThe study cohort had a mean age of 41 years and included 53 % females. Nearly half of the patients lived less than 10 kilometers from the study center. 72 % of patients referred themselves. The main symptoms were itching and occurrence of a rash; these symptoms had been present for more than a week on average. A general manifestation was present on the skin in most cases. 55 % of patients were seen by a dermatologist or a general practitioner before the consultation. Prior treatment had been received in 49 % of cases. Eight percent of patients were hospitalized. Eczema was the most common diagnosis, followed by urticaria and scabies.CONCLUSIONSThis study confirms that a considerable number of patients present with non-urgent diagnoses. Careful prescreening and sensitization of the population may be necessary to reverse this trend.

**Database:** Medline

### **3. Brimonidine displays anti-inflammatory properties in the skin through the modulation of the vascular barrier function.**

**Author(s):** Bertino, Béatrice; Blanchet-Réthoré, Sandrine; Thibaut de Ménonville, Séverine; Reynier, Philippe; Méhul, Bruno; Bogouch, Audrey; Gamboa, Bastien; Dugaret, Anne Sophie; Zugaj, Didier; Petit, Laurent; Roquet, Manon; Piwnica, David; Vial, Emmanuel; Bourdès, Valerie; Voegel, Johannes J; Nonne, Christelle

**Source:** Experimental dermatology; Dec 2018; vol. 27 (no. 12); p. 1378-1387

**Publication Date:** Dec 2018

**Publication Type(s):** Journal Article

**PubMedID:** 30290018

Available at [Experimental dermatology](#) - from Wiley

**Abstract:**BACKGROUNDRosacea is a chronic inflammatory skin disease. Characteristic vascular changes in rosacea skin include enlarged, dilated vessels of the upper dermis and blood flow increase. Brimonidine is approved for symptomatic relief of the erythema of rosacea. It acts by selectively binding to  $\alpha_2$ -adrenergic receptors present on smooth muscle in the peripheral vasculature, resulting in transient local vasoconstriction.OBJECTIVESTo provide further evidence of the anti-inflammatory potential of brimonidine across preclinical models of skin inflammation and its ability to decrease the neutrophil infiltration in human skin after ultraviolet light exposure.METHODSThe anti-inflammatory properties of brimonidine through modulation of the vascular barrier function were assessed using in vivo neurogenic vasodilation and acute inflammatory models and a well-described in vitro transmigration assay. A clinical study assessed the neutrophil infiltration in human skin after exposure to UV in 37 healthy Caucasian male subjects.RESULTSIn vitro, brimonidine affects the transmigration of human neutrophils through the endothelial barrier by modulating adhesion molecules. In vivo, in the mouse, topical treatment with brimonidine, used at a vasoconstrictive dose, confirmed its anti-inflammatory properties and prevented leucocyte recruitment (rolling and adhesion) mediated by endothelial cells. Topical pretreatment with brimonidine tartrate 0.33% gel once a day for 4 days significantly prevented

neutrophil infiltration by 53.9% in human skin after exposure to UV light. **CONCLUSION** Results from in vitro, in vivo and from a clinical study indicate that brimonidine impacts acute inflammation of the skin by interfering with neurogenic activation and/or recruitment of neutrophils.

**Database:** Medline

#### **4. Brimonidine displays anti-inflammatory properties in the skin through the modulation of the vascular barrier function**

**Author(s):** Bertino B.; Blanchet-Rethore S.; Thibaut de Menonville S.; Reynier P.; Mehul B.; Bogouch A.; Gamboa B.; Dugaret A.S.; Zugaj D.; Petit L.; Roquet M.; Piwnica D.; Vial E.; Bourdes V.; Voegel J.J.; Nonne C.

**Source:** Experimental Dermatology; Dec 2018; vol. 27 (no. 12); p. 1378-1387

**Publication Date:** Dec 2018

**Publication Type(s):** Article

**PubMedID:** 30290018

Available at [Experimental dermatology](#) - from Wiley

**Abstract:**Background: Rosacea is a chronic inflammatory skin disease. Characteristic vascular changes in rosacea skin include enlarged, dilated vessels of the upper dermis and blood flow increase. Brimonidine is approved for symptomatic relief of the erythema of rosacea. It acts by selectively binding to alpha2-adrenergic receptors present on smooth muscle in the peripheral vasculature, resulting in transient local vasoconstriction. Objective(s): To provide further evidence of the anti-inflammatory potential of brimonidine across preclinical models of skin inflammation and its ability to decrease the neutrophil infiltration in human skin after ultraviolet light exposure. Method(s): The anti-inflammatory properties of brimonidine through modulation of the vascular barrier function were assessed using in vivo neurogenic vasodilation and acute inflammatory models and a well-described in vitro transmigration assay. A clinical study assessed the neutrophil infiltration in human skin after exposure to UV in 37 healthy Caucasian male subjects. Result(s): In vitro, brimonidine affects the transmigration of human neutrophils through the endothelial barrier by modulating adhesion molecules. In vivo, in the mouse, topical treatment with brimonidine, used at a vasoconstrictive dose, confirmed its anti-inflammatory properties and prevented leucocyte recruitment (rolling and adhesion) mediated by endothelial cells. Topical pretreatment with brimonidine tartrate 0.33% gel once a day for 4 days significantly prevented neutrophil infiltration by 53.9% in human skin after exposure to UV light. Conclusion(s): Results from in vitro, in vivo and from a clinical study indicate that brimonidine impacts acute inflammation of the skin by interfering with neurogenic activation and/or recruitment of neutrophils. Copyright © 2018 John Wiley & Sons A/S. Published by John Wiley & Sons Ltd

**Database:** EMBASE

#### **5. The Epidemiology of Micro-Arteriovenous Fistulas in the Lower Legs.**

**Author(s):** Serizawa, Fukashi; Tanaka, Miyako; Shimizu, Takuya; Akamatsu, Daijirou; Ohara, Masato; Goto, Hitoshi; Kamei, Takashi

**Source:** Annals of vascular surgery; Nov 2018

**Publication Date:** Nov 2018

**Publication Type(s):** Journal Article

**PubMedID:** 30500644

**Abstract:**OBJECTIVE Patients presenting with edema, skin redness, pain, and itching in their lower legs are common and encountered often in daily practice. However, although commonly recognized diseases, such as deep venous thrombosis (DVT), stasis dermatitis due to varicose veins, lymphedema, and cellulitis, are diagnosed correctly in most cases, micro-arteriovenous fistulas (AVFs) may often be overlooked due to low awareness and rarity. This study was carried out to evaluate the prevalence of micro-AVF in patients presenting with foot skin symptoms. METHODS A total of 134 patients (184 limbs) visited the Department of Vascular Surgery at Kesennuma City Hospital with edema, skin redness, pain, and itching in their lower legs from January to September 2017 and were enrolled and followed up until November 2017. All patients received ultrasonic inspection of their symptomatic limb, and a blood test (white blood cell count, C-reactive protein and D-Dimer) was performed if needed. When micro-AVF was detected in one limb, the other limb was routinely inspected by ultrasonography. A computed tomography scan was performed with the patient's consent. Patients diagnosed with micro-AVF started compression therapy immediately and were followed up for at least 2 months. A surgical procedure was considered if the symptoms worsened. RESULTS Micro-AVFs were detected in 24 limbs (13%, 24/184) of 14 patients (seven males and seven females; age,  $70 \pm 11.7$  years). Four patients had unilateral skin symptoms with unilateral micro-AVFs and seven patients had unilateral skin symptoms and bilateral micro-AVFs. Three patients had bilateral skin symptoms and bilateral micro-AVFs. Asymptomatic micro-AVFs were detected in seven limbs. Subjective symptoms disappeared and skin appearance normalized in 14 limbs of twelve patients during the first 2 months with compression therapy only. Compression therapy was not effective in three limbs of two patients and they underwent vein ligation surgery. None of the patients had a surgical history or history of trauma in their lower legs. CONCLUSIONS Among the lower legs presenting with skin symptoms, we detected micro-AVFs in 13% of limbs and; therefore, micro-AVF of the lower leg is not as rare as previously thought. In addition, 10 of 14 patients (71%) had micro-AVFs of the lower leg bilaterally.

**Database:** Medline

## **6. Report of the proceedings of a UK skin safety advisory group.**

**Author(s):** Browning, Paul; Beeckman, Dimitri; White, Richard; Connolly, Roisin; Rodgers, Angela; Maclean, Gillian; Fumarola, Sian; Harker, Judy; Murray, Victoria; Foster, Steve

**Source:** British journal of nursing (Mark Allen Publishing); Nov 2018; vol. 27 (no. 20); p. S34

**Publication Date:** Nov 2018

**Publication Type(s):** Journal Article

**PubMedID:** 30418847

**Abstract:**Moisture-associated skin damage, especially incontinence-associated dermatitis, continues to present significant health challenges and requires multidisciplinary input to provide effective prevention and treatment. In the absence of mandatory reporting such damage is under- or wrongfully reported, resulting in a lack of accurate data on prevalence and costs of associated care. In March this year, a multidisciplinary team of experts met in the UK to seek to determine measures to improve patient skin care. They aimed to identify activities to increase awareness and education, collect data, and improve prevention and treatment regimes. This article describes that discussion and the conclusions made by the group, such as the key actions required to effect policy changes.

**Database:** Medline

### **7. Malassezia infections with systemic involvement: Figures and facts.**

**Author(s):** Pedrosa, Ana Filipa; Lisboa, Carmen; Rodrigues, Acácio Gonçalves

**Source:** The Journal of dermatology; Nov 2018; vol. 45 (no. 11); p. 1278-1282

**Publication Date:** Nov 2018

**Publication Type(s):** Journal Article Review

**PubMedID:** 30264900

Available at [The Journal of dermatology](#) - from Wiley

**Abstract:** Malassezia are lipophilic and commensal yeasts capable of inducing skin disease among susceptible hosts. However, severely immunocompromised patients and preterm infants admitted to intensive care units are particularly at risk of developing Malassezia systemic infections. Patients often have central venous catheters which are usually the portal of entry for colonization and infection. In addition to the clinically non-specific findings, a delay in the laboratorial diagnosis may occur as there is often the need to add lipid supplementation to culture in order to support these organisms' growth. Herein, we report three unrelated cases of Malassezia bloodstream infection at a university hospital during a 2-year period, followed by a discussion of the clinical results and comparison with the most recently available published data on epidemiology and risk factors, pathogenesis, diagnosis, susceptibility profile and treatment.

**Database:** Medline

### **8. Diffuse cutaneous mastocytosis: Case report and literature review.**

**Author(s):** Hosking, Anna-Marie; Makdisi, Joy; Ortenzio, Francesca; de Feraudy, Sebastien; Smith, Janellen; Linden, Kenneth

**Source:** Pediatric dermatology; Nov 2018; vol. 35 (no. 6); p. e348

**Publication Date:** Nov 2018

**Publication Type(s):** Case Reports Journal Article Review

**PubMedID:** 30187958

Available at [Pediatric dermatology](#) - from Wiley

**Abstract:** A 6-month-old boy was referred to our burn unit with a recurrent bullous dermatitis, fever, and emesis, originally diagnosed as staphylococcal scalded skin syndrome (SSSS) at an outside hospital. Infectious workup was negative and shave biopsy revealed a dense, diffuse dermal infiltrate of mast cells, consistent with diffuse cutaneous bullous mastocytosis—a rare variant of cutaneous mastocytosis. Treatment included a prolonged course of corticosteroids and antihistamines. Recognition of this rare form of mastocytosis is important, as it can be easily mistaken for other pediatric bullous diseases and is associated with life-threatening complications including vasodilation, anaphylactic shock, gastrointestinal bleeding, and death.

**Database:** Medline

### **9. The use of rituximab in treatment of epidermolysis bullosa acquisita: Three new cases and a review of the literature.**

**Author(s):** Bevans, Stephanie L; Sami, Naveed

**Source:** Dermatologic therapy; Oct 2018 ; p. e12726

**Publication Date:** Oct 2018

**Publication Type(s):** Journal Article

**PubMedID:** 30284354

Available at [Dermatologic therapy](#) - from Wiley

**Abstract:** Epidermolysis bullosa acquisita (EBA) is a rare, subepidermal blistering disease affecting the skin and mucous membranes that often remains refractory to standard immunosuppressive therapy. We present three original cases and a review of the literature of 20 cases of refractory EBA treated with rituximab as monotherapy or in combination with other agents. Complete control (with or without therapy) and remission were seen in 56% of patients treated with rituximab monotherapy and 75% of patients treated with rituximab and immunoadsorption (IA). We conclude EBA refractory to standard immunosuppressive therapy may show a more favorable long-term response to the addition of rituximab; and rituximab in combination with intravenous immunoglobulin or IA may provide utility in terminating acute disease. Additional data are needed to evaluate the safety and long-term outcomes of rituximab-based treatment.

**Database:** Medline

### **10. Diagnosing Pemphigus Foliaceus: A Rare Blistering Disease Masquerading as a Common Dermatologic Disorder.**

**Author(s):** Flood, Daniel; Lezanski-Gujda, Amanda; Miletta, Nathaniel R

**Source:** Military medicine; Sep 2018

**Publication Date:** Sep 2018

**Publication Type(s):** Journal Article

**PubMedID:** 30215775

Available at [Military medicine](#) - from EBSCO (MEDLINE Complete)

**Abstract:** Pemphigus foliaceus (PF) is an autoimmune dermatologic disease that typically presents with painful, superficial blisters that evolve into scaling erosions in a seborrheic distribution. This case study intends to demonstrate that due to the relative scarcity of the disease and its distribution on the body, PF can easily be misdiagnosed. We present a 43-year-old African American male that presented to the dermatology clinic with an 18-month history of non-pruritic, violaceous, scaling patches and plaques most prominent on the malar cheeks, upper chest and upper back. He had been evaluated at an outside hospital with a high suspicion for cutaneous lupus erythematosus (CLE) and seborrheic dermatitis. However, repeated biopsies revealed non-specific spongiotic dermatitis, not consistent with CLE or seborrheic dermatitis. Over the subsequent months, he received treatment for both conditions without improvement in his symptoms. When he was referred to our dermatology clinic, repeat biopsies were obtained which demonstrated acantholysis and dyskeratosis in the granular layer, consistent with PF. Direct immunofluorescence revealed intercellular IgG staining most prominent in the epidermis, also consistent with PF. Finally, enzyme-linked immunosorbent assay for anti-desmoglein 1 returned positive, confirming the diagnosis. Upon review of the previous biopsies, focal areas of acantholysis and dyskeratosis were noted in the granular layer, which would have pointed away from a diagnosis of CLE or seborrheic dermatitis if PF was included in the clinical differential diagnosis. This case serves as a reminder that when there is a discrepancy in clinical-pathologic correlation, it is important to revisit the case and consider other pathologies.

**Database:** Medline

## **11. Roles of the Glucocorticoid and Mineralocorticoid Receptors in Skin Pathophysiology.**

**Author(s):** Sevilla, Lisa M; Pérez, Paloma

**Source:** International journal of molecular sciences; Jun 2018; vol. 19 (no. 7)

**Publication Date:** Jun 2018

**Publication Type(s):** Journal Article Review

**PubMedID:** 29966221

Available at [International journal of molecular sciences](#) - from Europe PubMed Central - Open Access

**Abstract:**The nuclear hormone receptor (NR) superfamily comprises approximately 50 evolutionarily conserved proteins that play major roles in gene regulation by prototypically acting as ligand-dependent transcription factors. Besides their central role in physiology, NRs have been largely used as therapeutic drug targets in many chronic inflammatory conditions and derivatives of their specific ligands, alone or in combination, are frequently prescribed for the treatment of skin diseases. In particular, glucocorticoids (GCs) are the most commonly used compounds for treating prevalent skin diseases such as psoriasis due to their anti-proliferative and anti-inflammatory actions. However, and despite their therapeutic efficacy, the long-term use of GCs is limited because of the cutaneous adverse effects including atrophy, delayed wound healing, and increased susceptibility to stress and infections. The GC receptor (GR/NR3C1) and the mineralocorticoid receptor (MR/NR3C2) are members of the NR subclass NR3C that are highly related, both structurally and functionally. While the GR is ubiquitously expressed and is almost exclusively activated by GCs; an MR has a more restricted tissue expression pattern and can bind GCs and the mineralocorticoid aldosterone with similar high affinity. As these receptors share 95% identity in their DNA binding domains; both can recognize the same hormone response elements; theoretically resulting in transcriptional regulation of the same target genes. However, a major mechanism for specific activation of GRs and/or MRs is at the pre-receptor level by modulating the local availability of active GCs. Furthermore, the selective interactions of each receptor with spatio-temporally regulated transcription factors and co-regulators are crucial for the final transcriptional outcome. While there are abundant genome wide studies identifying GR transcriptional targets in a variety of tissue and cell types; including keratinocytes; the data for MR is more limited thus far. Our group and others have studied the role of GRs and MRs in skin development and disease by generating and characterizing mouse and cellular models with gain- and loss-of-function for each receptor. Both NRs are required for skin barrier competence during mouse development and also play a role in adult skin homeostasis. Moreover, the combined loss of epidermal GRs and MRs caused a more severe skin phenotype relative to single knock-outs (KOs) in developing skin and in acute inflammation and psoriasis, indicating that these corticosteroid receptors play cooperative roles. Understanding GR- and MR-mediated signaling in skin should contribute to deciphering their tissue-specific relative roles and ultimately help to improve GC-based therapies.

**Database:** Medline

## **12. The utilization of phototherapy in the department of dermatology, Hospital Kuala Lumpur: A 5-year audit.**

**Author(s):** Vaani, V V; Tang, M M; Tan, L L; Asmah, J

**Source:** The Medical journal of Malaysia; Jun 2018; vol. 73 (no. 3); p. 125-130

**Publication Date:** Jun 2018

**Publication Type(s):** Journal Article

**PubMedID:** 29962494

Available at [The Medical journal of Malaysia](#) - from EBSCO (MEDLINE Complete)

**Abstract:**INTRODUCTIONUltraviolet phototherapies are important treatment modalities for a wide range of dermatological conditions. We aim to describe the utilization of phototherapy in the Department of Dermatology Hospital Kuala Lumpur.METHODSThis is a 5-year retrospective audit on patients who underwent phototherapy between 2011 and 2015.RESULTSThere were 892 patients, M:F=1.08:1, aged from 4- 88 years, with a median age of 38.8 years who underwent phototherapy. Majority (58.9%) had skin phototype IV, followed by type III (37.7%) and type II (0.7%). There were 697(78.1%) who underwent NBUVB, 136 (15.2%) had topical PUVA, 22(2.5%) had oral PUVA, 12(1.4%) had UVA1 and 23(2.6%) had NBUVB with topical or oral PUVA/UVA1 at different time periods. The indications were psoriasis (46.6%), vitiligo (26.7%), atopic eczema (9.8%), pityriasis lichenoides chronica (5.3%), mycosis fungoides (3.9%), lichen planus (2.5%), nodular prurigo (2.2%), scleroderma (1.2%), alopecia areata (0.7%) and others. The median number of session received were 27 (range 1-252) for NBUVB, 30 (range 1-330) for topical PUVA, 30 (range 3-190) for oral PUVA and 24.5 (range 2-161) for UVA1. The acute adverse effects experienced by patients were erythema (18%), pruritus (16.3%), warmth (3.3%), blister formation (3.1%), cutaneous pain (2.4%), and xerosis (0.8%), skin swelling (0.7%) and phototoxicity (0.2%).CONCLUSIONNarrow-band UVB was the most frequently prescribed phototherapy modality in our center. The most common indication for phototherapy in our setting was psoriasis. Acute adverse events occurred in a third of patients, although these side effects were mild.

**Database:** Medline

### 13. Guideline-compliant prescription of biologicals and possible barriers in dermatological practices in Bavaria.

**Author(s):** Schielein, M C; Tizek, L; Rotter, M; Konstantinow, A; Biedermann, T; Zink, A

**Source:** Journal of the European Academy of Dermatology and Venereology : JEADV; Jun 2018; vol. 32 (no. 6); p. 978-984

**Publication Date:** Jun 2018

**Publication Type(s):** Journal Article

**PubMedID:** 29356181

Available at [Journal of the European Academy of Dermatology and Venereology : JEADV](#) - from Wiley

**Abstract:**INTRODUCTIONPsoriasis and urticaria are chronic inflammatory skin diseases, which account for a substantial socioeconomic burden and severely affect patients' quality of life. According to the respective German guidelines, biologicals can be used for the treatment of severe forms of these diseases. However, only a minority of patients receive this advised treatment.OBJECTIVETo analyse the prescription of biologicals according to the German national guidelines for psoriasis and chronic spontaneous urticaria and to assess possible barriers to prescription.MATERIALS AND METHODSCross-sectional, questionnaire-based study including all Bavarian dermatologists based in private practices. Linear and logistic regression models were used to identify significant influencing factors on the perception of possible barriers.RESULTSBetween January 2017 and February 2017, a total of 137 (of 499) dermatologists participated. Of all patients with moderate to severe psoriasis and chronic spontaneous urticaria, participating dermatologists indicated treating 14.2% and 6.9% with biologicals, respectively. The most prevalent barriers to prescription were the high cost of the therapy, the low reimbursement and the fear of recourse.

Analysis showed that age, years spent working in a dermatological hospital and the number of patients treated with moderate to severe psoriasis affect the perception of many barriers. Furthermore, age and barriers related to physician factors and external factors were identified as modifiers to the prescription scheme of dermatologists. CONCLUSION The role of clinical education and the importance of external and economic barriers in comparison with medical barriers have to be emphasised. Guideline-compliant use of biologicals has to be optimised. Further research is needed to ascertain not only a barrier pattern for Bavaria but also for wider settings. Actions based on this for psoriasis are needed to achieve the goal of the WHO Global Psoriasis Report to strengthen the role of patient-centred care and improve the quality of life of affected patients. Analogue, this applies also for urticaria.

**Database:** Medline

## Cancer

### **14. Randomized, Prospective, Open-label Phase III Trial Comparing Mebo Ointment With Biafine Cream for the Management of Acute Dermatitis During Radiotherapy for Breast Cancer.**

**Author(s):** Geara, Fady B; Eid, Toufic; Zouain, Nicolas; Thebian, Ranim; Andraos, Therese; Chehab, Chirine; Ramia, Paul; Youssef, Bassem; Zeidan, Youssef H

**Source:** American journal of clinical oncology; Dec 2018; vol. 41 (no. 12); p. 1257-1262

**Publication Date:** Dec 2018

**Publication Type(s):** Journal Article

**PubMedID:** 29889137

**Abstract:** PURPOSE Acute radiation dermatitis is a common side-effect of radiotherapy in breast cancer and has a profound impact on patients' quality of life, due to pain and discomfort. The aim of this study is to compare the effect of  $\beta$ -sitosterol (Mebo) ointment to trolamine (Biafine) cream for the prevention and treatment of radiation dermatitis in breast cancer patients receiving adjuvant radiation therapy. MATERIALS AND METHOD This is a prospective open-label randomized phase III study developed to assess the efficacy of 2 topical agents used for management of acute radiation dermatitis. Female breast cancer patients who needed a course of radiation therapy in our institution were enrolled and randomized into 2 groups 1 with Mebo ointment and 1 with Biafine cream. Both medications were applied twice per day during the whole period of treatment and skin reactions and related symptoms were assessed weekly during the entire course. Grading of skin reactions was done according to the Radiation Therapy Oncology Group grading system. RESULTS Between September 2015 and May 2017, a total of 161 patients were recruited for this trial. Mean age was similar for both groups ( $50.19 \pm 12.57$  vs.  $51.73 \pm 11.23$ , respectively,  $P=0.41$ ). All other patients and treatment characteristics were similar in both groups, except for the use of boost (82.7% in the Biafine group vs. 36.7% in Mebo group,  $P=0.012$ ). Analysis was done for reactions recorded before the beginning of the boost and for the entire course including the boost. Using univariate and multivariate analysis, there was no significant difference in grades 2 and 3 dermatitis between the 2 groups. However, the incidence of severe pruritus and severe local skin pain were both significantly reduced in the Mebo group (14.1% in Biafine vs. 2.9% in Mebo,  $P=0.016$  for pruritus and 11.5% vs. 1.4%, respectively,  $P=0.02$  for severe pain). CONCLUSION This study showed no difference between Mebo and Biafine in the incidence and severity of breast skin

dermatitis during radiation therapy. However, the use of Mebo ointment was associated with decreased severe pruritus and pain which could positively affect patient comfort and quality of life.

**Database:** Medline

**15. Topical silymarin administration for prevention of acute radiodermatitis in breast cancer patients: A randomized, double-blind, placebo-controlled clinical trial.**

**Author(s):** Karbasforooshan, Hedyeh; Hosseini, Sare; Elyasi, Sepideh; Fani Pakdel, Azar; Karimi, Gholamreza

**Source:** Phytotherapy research : PTR; Nov 2018

**Publication Date:** Nov 2018

**Publication Type(s):** Journal Article

**PubMedID:** 30479044

Available at [Phytotherapy research : PTR](#) - from Wiley

**Abstract:** Radiation-induced dermatitis is one of the most common side effects of radiotherapy. Silymarin, a flavonoid extracted from the *Silybum marianum*, exhibits antioxidant and anti-inflammatory activities. The purpose of this study was to investigate the efficacy of silymarin gel in prevention of radiodermatitis in patients with breast cancer. During this randomized, double-blinded, placebo-controlled clinical trial, the preventive effect of silymarin 1% gel was assessed in comparison with placebo, on radiodermatitis occurrence. Forty patients randomly received silymarin gel or placebo formulation on chest wall skin following modified radical mastectomy, once daily starting at the first day of radiotherapy for 5 weeks. Radiodermatitis severity was assessed weekly based on Radiation Therapy Oncology Group (RTOG) and National Cancer Institute Common Terminology for Adverse Events (NCI-CTCAE) criteria radiodermatitis grading scale for 5 weeks. The median NCI-CTCAE and RTOG scores were significantly lower in silymarin group at the end of the third to fifth weeks ( $p$  value < 0.05). The scores increased significantly in both placebo and silymarin groups during radiotherapy, but there was a delay in radiodermatitis development and progression in silymarin group. Prophylactic administration of silymarin gel could significantly reduce the severity of radiodermatitis and delay its occurrence after 5 weeks of application.

**Database:** Medline

**16. Application of red light phototherapy in the treatment of radioactive dermatitis in patients with head and neck cancer.**

**Author(s):** Zhang, Xudong; Li, Hongfei; Li, Qian; Li, Ying; Li, Chao; Zhu, Minmin; Zhao, Bing; Li, Guowen

**Source:** World journal of surgical oncology; Nov 2018; vol. 16 (no. 1); p. 222

**Publication Date:** Nov 2018

**Publication Type(s):** Journal Article

**PubMedID:** 30419911

Available at [World journal of surgical oncology](#) - from ProQuest (Hospital Premium Collection) - NHS Version

Available at [World journal of surgical oncology](#) - from BioMed Central

Available at [World journal of surgical oncology](#) - from Europe PubMed Central - Open Access

**Abstract:**BACKGROUND To observe the effect of red light phototherapy (RLPT) on radioactive dermatitis (RD) caused by radiotherapy in patients with head and neck cancer (HNC).METHODS Sixty patients with HNC admitted to our hospital were randomly divided into experimental group and control group, 30 patients in each group. The control group received routine daily care during radiotherapy treatment. In the experimental group, in addition to routine daily care during radiotherapy treatment, photon therapy apparatus RLPT was added, 10 min/time, 2 times/day, and lasted until the end of radiotherapy. The pain and conditions of the patients' skin were assessed daily, and the skin pain and dermatitis grades of the two groups were compared.RESULTS In terms of the reaction degree of RD, experimental group was mainly grade 0-2, and control group was mainly grade 2-3, with a significant difference ( $P < 0.05$ ). In terms of skin pain, according to the pain records at week 2, 3, and 4, the pain degree increased with time. However, the score of wound pain in experimental group was significantly lower than that in control group, and there was a significant difference between the two groups ( $P < 0.05$ ).CONCLUSION The application of RLPT in the treatment of RD can help accelerate wound healing and significantly shorten healing time. It can not only reduce wounds pain of patients, promote inflammation and ulcer healing, but also ensure the smooth progress of patients' radiotherapy and improve their quality of lives, which is worth popularization and application in the clinical practice.

**Database:** Medline

### **17. Acute radiodermatitis in modern adjuvant 3D conformal radiotherapy for breast cancer - the impact of dose distribution and patient related factors.**

**Author(s):** Borm, Kai J; Loos, Maximilian; Oechsner, Markus; Mayinger, Michael C; Paepke, Daniela; Kiechle, Marion B; Combs, Stephanie E; Duma, Marciana N

**Source:** Radiation oncology (London, England); Nov 2018; vol. 13 (no. 1); p. 218

**Publication Date:** Nov 2018

**Publication Type(s):** Journal Article

**PubMedID:** 30404664

Available at [Radiation oncology \(London, England\)](#) - from ProQuest (Hospital Premium Collection) - NHS Version

Available at [Radiation oncology \(London, England\)](#) - from BioMed Central

Available at [Radiation oncology \(London, England\)](#) - from Europe PubMed Central - Open Access

Available at [Radiation oncology \(London, England\)](#) - from EBSCO (MEDLINE Complete)

**Abstract:**PURPOSE This study was performed to evaluate skin toxicity during modern three-dimensional conformal radiotherapy (3D-CRT) and to evaluate the importance of dose distribution and patient related factors.MATERIAL AND METHOD This study comprises 255 patients with breast cancer treated with tangential three-dimensional conformal radiotherapy (3D-CRT) after breast conserving surgery between 03/2012 and 05/2017. The median prescribed dose was 50.4 Gy (range 50-50.4) and 92.2% of the patients received a sequential boost of 10-16 Gy. Adverse skin toxicities (according to CTCAE v. 4.03 and the occurrence of moist desquamations) were assessed at the end of treatment. The dose distribution in the skin (5 mm strip from the patient outline) and in the CTV was evaluated and correlated to the CTCAE scores and the occurrence of moist desquamation.RESULTS 42.4% of the patients developed grade I, 55.7% grade II and 2% grade III skin toxicities. Moist desquamation was observed in 59 cases (23.1%). Dose distribution within the CTV and skin was homogenous with only small areas receiving 107% of the prescribed dose (median: 0.7 cm<sup>3</sup>) in the CTV and 105% (median 0.5 cm<sup>3</sup>) in the skin. On univariate analysis breast size as well as V107%(CTV), V105%(skin) and V80%(skin) correlated significantly ( $p < 0.05$ ) with the incidence of

skin toxicity. On multivariate analysis only V80%(skin) was confirmed as independent risk factor. CONCLUSION Modern tangential multi-field 3D-CRT allows a homogeneous dose distribution with similar skin toxicity as compared to studies performing IMRT. Dose distribution within the skin (V80%) might have a relevant impact on the severity of skin toxicity and the occurrence of moist desquamation.

**Database:** Medline

### **18. Radiation-induced dermatitis after administration of mogamulizumab for adult T-cell leukaemia/lymphoma: a multi-institutional retrospective study.**

**Author(s):** Maemoto, Hitoshi; Ariga, Takuro; Kusada, Takeaki; Heianna, Joichi; Manabe, Yoshihiko; Miyakawa, Akifumi; Nakachi, Sawako; Morishima, Satoko; Iraha, Shiro; Ganaha, Fumikiyo; Masuzaki, Hiroaki; Murayama, Sadayuki

**Source:** Japanese journal of clinical oncology; Nov 2018

**Publication Date:** Nov 2018

**Publication Type(s):** Journal Article

**PubMedID:** 30452692

**Abstract:** Background Cutaneous adverse reactions are frequently induced by mogamulizumab. Cases of Stevens-Johnson syndrome, toxic epidermal necrolysis and severe photosensitivity related to mogamulizumab have been reported. This study investigated whether severe radiation-induced dermatitis occurred in patients undergoing radiotherapy after the administration of mogamulizumab for adult T-cell leukaemia/lymphoma. Methods We retrospectively reviewed 46 courses of radiotherapy administered to 15 consecutive patients with adult T-cell leukaemia/lymphoma (acute, n = 7; lymphoma, n = 7; smouldering, n = 1) who received mogamulizumab before or during radiotherapy at three institutions between 2012 and 2017. Results During 43 of the 46 radiotherapy courses, patients developed Grade  $\leq 1$  radiation-induced dermatitis. No patient developed Grade  $\geq 3$  radiation-induced dermatitis. No patient was prescribed ointments as prophylactic treatment for radiation-induced dermatitis. Development of radiation-induced dermatitis was not significantly associated with the number of days since the administration of mogamulizumab prior to radiotherapy ( $P = 0.85$ ), frequency of administration of mogamulizumab before/during radiotherapy ( $P = 0.33$ ), administration of mogamulizumab during radiotherapy ( $P = 0.41$ ) or types of lesions in adult T-cell leukaemia/lymphoma cases (cutaneous vs. non-cutaneous,  $P = 0.74$ ). Development of radiation-induced dermatitis was significantly related to the total cutaneous dose (mean, 31.9 Gy [95% confidence interval: 26.6-37.1 Gy] vs. 19.7 Gy [95% confidence interval: 16.2-23.2 Gy],  $P = 0.0004$ ) and total prescribed dose (mean, 31.5 Gy [95% confidence interval: 26.2-36.8 Gy] vs. 18.5 Gy [95% confidence interval: 15.0-22.0 Gy],  $P = 0.0002$ ). Conclusion None of the 15 patients who received moderate-dose radiotherapy developed severe radiation-induced dermatitis during the 46 courses of radiotherapy after mogamulizumab administration.

**Database:** Medline

### **19. Serum amyloid A levels in the blood of patients with atopic dermatitis and cutaneous T-cell lymphoma.**

**Author(s):** Suzuki, Hideko; Sugaya, Makoto; Nakajima, Rina; Oka, Tomonori; Takahashi, Naomi; Nakao, Momoko; Miyagaki, Tomomitsu; Asano, Yoshihide; Sato, Shinichi

**Source:** The Journal of dermatology; Oct 2018

**Publication Date:** Oct 2018

**Publication Type(s):** Journal Article

**PubMedID:** 30289574

Available at [The Journal of dermatology](#) - from Wiley

**Abstract:** Serum amyloid A (SAA) is an acute phase protein, which activates immune cells and induces cytokines and chemokine. SAA levels in blood have been reported to be elevated in case of inflammation, infections, neoplasia and tissue injury. In this study, we examined SAA levels in the blood of patients with atopic dermatitis (AD) and cutaneous T-cell lymphoma (CTCL). SAA levels in sera of AD patients, those of CTCL patients and those of healthy controls were not significantly different. When AD or CTCL patients were classified by disease severity, there was still no difference in SAA levels. In AD patients, however, SAA levels positively correlated with the number of eosinophils in peripheral blood and serum soluble interleukin-2 receptor (sIL-2R) levels. There were significant correlations between SAA levels in blood and the number of white blood cells in peripheral blood and serum sIL-2R levels in CTCL patients. AD patients without topical steroid treatment and CTCL patients without narrowband ultraviolet B therapy showed increased levels of SAA, which suggested that SAA levels may easily fluctuate with treatment. These results imply a possible contribution of SAA in development of AD and CTCL.

**Database:** Medline

## **20. Biophysical skin measurements to evaluate the effectiveness of photobiomodulation therapy in the prevention of acute radiation dermatitis in breast cancer patients.**

**Author(s):** Robijns, Jolien; Censabella, Sandrine; Claes, Stefan; Pannekoek, Luc; Bussé, Lore; Colson, Dora; Kaminski, Iris; Lodewijckx, Joy; Bulens, Paul; Maes, Annelies; Noé, Leen; Brosens, Marc; Timmermans, An; Lambrichts, Ivo; Somers, Veerle; Mebis, Jeroen

**Source:** Supportive care in cancer : official journal of the Multinational Association of Supportive Care in Cancer; Oct 2018

**Publication Date:** Oct 2018

**Publication Type(s):** Journal Article

**PubMedID:** 30270415

**Abstract:** **PURPOSE** The purpose of this study was to evaluate objectively the effectiveness of photobiomodulation therapy (PBMT) for the prevention of acute radiation dermatitis (ARD) by using biophysical skin measurements. **METHODS** A randomized, placebo-controlled trial with 120 breast cancer patients who underwent an identical radiotherapy (RT) regimen post-lumpectomy was performed (TRANSDERMIS trial). Patients were randomized to receive PBM (808 nm CW/905 nm pulsed, 168 mW/cm<sup>2</sup>, spot size 19.6 cm<sup>2</sup>, fluence 4 J/cm<sup>2</sup>) or placebo treatments from the first day of RT (2x/week). Biophysical skin measurements were collected to assess the skin pigmentation and barrier function. Measurements were collected at the first day of RT, a RT dose of 40 Gray (Gy), and the end of RT (66 Gy). **RESULTS** The incidence of moist desquamation was significantly higher in the control than in the PBMT group at the end of RT (30 vs. 7%, respectively, odds ratio = 6, p = 0.004). The biophysical skin measures showed that the mean percentage change from the baseline transepidermal water loss (TEWL), erythema, and melanin values was significantly higher in the

control than in the PBMT group at the end of RT (ps 800 cc) breast volume (odds ratio = 4, p = 0.017).CONCLUSIONSThis is the first randomized controlled trial demonstrating by objective measurements that PBMT is effective in reducing the incidence of moist desquamation in breast cancer patients undergoing RT. Additionally, a large breast volume is an important risk factor for the development of moist desquamation.

**Database:** Medline

## Eczema/dermatitis

### 21. Methotrexate in the Treatment of Moderate to Severe Atopic Dermatitis: A Retrospective Study [Formula: see text].

**Author(s):** Shah, Nidhi; Alhusayen, Raed; Walsh, Scott; Shear, Neil H

**Source:** Journal of cutaneous medicine and surgery; ; vol. 22 (no. 5); p. 484-487

**Publication Type(s):** Journal Article

**PubMedID:** 29855201

**Abstract:**BACKGROUNDAtopic dermatitis is a common inflammatory condition of the skin. Moderate to severe cases not responding to topical treatments and lifestyle changes may need second-line therapy. Methotrexate has been suggested as an effective treatment in such cases.OBJECTIVETHis study was done to determine the efficacy, adverse effects, and safety profile of methotrexate therapy in patients with atopic dermatitis.MATERIALS/METHODSAll adult patients with moderate to severe atopic dermatitis seen in the dermatology clinic at this tertiary hospital from January 2015 to December 2015 who were treated with methotrexate were reviewed in a retrospective chart review.RESULTSForty-one patients (19 female, 22 male, mean age 45 years, range 19-90 years) were enrolled. Of these, 29% were naive to any systemic treatments in the past, including systemic corticosteroids. Methotrexate treatment resulted in excellent improvement (>75%) in 93% of patients, good (50%-75% improvement) in 5%, and partial (25%-50% improvement) in 2%. Median duration of therapy was 26 months, and 80% of patients were still on treatment at last review. Transient nonsignificant elevation of transaminases was the most common adverse effect noted in 20%, followed by nausea in 12% and fatigue in 7%. A fibroscan was done in 10 patients at cumulative doses ranging from 2 to 11 g methotrexate. No liver fibrosis was seen in these patients.CONCLUSIONMethotrexate is an effective treatment for moderate to severe atopic dermatitis with an acceptable safety profile. A low dose can be used to control the disease for prolonged periods without significant risk.

**Database:** Medline

### 22. ECZEMA: SOOTHING SORENESS

**Author(s):** Windell, John

**Source:** Community Practitioner; ; vol. 91 (no. 10); p. 22

**Publication Type(s):** Journal Article

Available at [Community Practitioner](#) - from ProQuest (Hospital Premium Collection) - NHS Version

**Abstract:**Eczema affects around one in five children in the UK (National Eczema Society (NES), 2018). Although a common condition, it is also highly personalised: the underlying causes and the triggers vary from case to case, as do the symptoms. Some children experience eczema as a patch of mildly

dry, red, itchy skin, often behind the knees or in the crook of the elbow. Others will have extensive areas of their bodies that are inflamed, cracked and crusty, even weeping and bleeding. At its most severe, eczema is uncomfortable, stressful and distressing for children and their families.

Researchers divided 483 children with eczema into two randomised groups. One group followed their usual treatment, while the other used bath additives as well. At the end of the trial, the researchers found that, while eczema symptoms had eased slightly for most of the children, there was no significant difference between the two groups. They concluded that additive bath emollients didn't seem to help--though neither did they make things worse.

**Database:** BNI

### **23. A practical algorithm for topical treatment of atopic dermatitis in the Middle East emphasizing the importance of sensitive skin areas**

**Author(s):** Reda A.M.; Elgendi A.; Ebraheem A.I.; Aldraibi M.S.; Abdulghani M.M.R.; Qari M.S.; Luger T.

**Source:** Journal of Dermatological Treatment; 2018

**Publication Date:** 2018

**Publication Type(s):** Article In Press

**Abstract:**Background There is a need for safe, effective treatment for atopic dermatitis (AD) in the Middle East. Objective To propose a practical algorithm for the treatment of AD throughout the Middle East. Methods An international panel of six experts from the Middle East and one from Europe developed the algorithm. The practical treatment guide was based on a review of published guidelines on AD, an evaluation of relevant literature published up to August 2016 and local treatment practices. Results Patients with an acute mild-to-moderate disease flare on sensitive body areas should apply the topical calcineurin inhibitor (TCI), pimecrolimus 1% cream twice daily until clearance. For other body locations, a TCI, either pimecrolimus 1% cream, tacrolimus 0.03% ointment in children or 0.1% ointment in adults, should be applied twice daily until clearance. Emollients should be used as needed. Patients experiencing acute severe disease flares should apply a topical corticosteroid (TCS) according to their label for a few days to reduce inflammation. After clinical improvement, pimecrolimus for sensitive skin areas or TCIs for other body locations should be used until there is a complete resolution of lesions. Conclusions These recommendations are expected to optimize AD management in patients across the Middle East. Copyright © 2018, © 2018 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group.

**Database:** EMBASE

### **24. How often are bath emollients prescribed to children with atopic eczema in primary care in England? A cross-sectional study.**

**Author(s):** Ganatra, N; Ban, L; Harman, K; Thomas, K

**Source:** The British journal of dermatology; Dec 2018

**Publication Date:** Dec 2018

**Publication Type(s):** Letter

**PubMedID:** 30536786

Available at [The British journal of dermatology](#) - from Wiley

**Abstract:**Atopic eczema is one of the most burdensome skin diseases across the globe and affects up to 20% of children in the UK. The mainstay of treatment is regular use of emollients including leave-

on emollients, soap substitutes and emollient bath additives. However, the lack of evidence to support the use of bath additives has led some to question their role in atopic eczema management. A recently published, independent, randomised controlled trial has provided robust evidence that bath emollients provide no meaningful benefit in addition to standard care (regular use of leave-on emollients and avoidance of soap. This article is protected by copyright. All rights reserved.

**Database:** Medline

## 25. Abstracts.

**Author(s):** Irvine, A D; Jones, A P; Beattie, P; Baron, S; Browne, F; Ashoor, F; O'Neill, L; Rosala-Hallas, A; Sach, T; Spowart, C; Taams, L; Walker, C; Wan, M; Webb, N; Williamson, P; Flohr, C; TREAT Trial Investigators

**Source:** The British journal of dermatology; Dec 2018; vol. 179 (no. 6); p. e232

**Publication Date:** Dec 2018

**Publication Type(s):** Journal Article

**PubMedID:** 30508227

Available at [British Journal of Dermatology](#) - from Wiley

**Abstract:**Atopic eczema is a skin disease affecting around 20% of UK children, 16% of whom have moderate to severe disease. Severe atopic eczema can cause sleep disturbance, poor school attendance and social withdrawal, as well as attention-deficit hyperactivity disorder, anxiety and clinical depression. Skin can become infected and this can be a reason for hospital admission. Although most cases of atopic eczema can be treated with emollients, topical anti-inflammatory treatments and/or ultraviolet (UV) therapy, around 2% of children require oral (taken by mouth) immuno-suppressive treatment. The main treatment options of this type (called systemic agents) are Ciclosporin (CyA) and Methotrexate (MTX) and there is concern about their potential short- and long-term side effects. This article explains an upcoming clinical trial called "The TREATment of severe Atopic eczema Trial" (TREAT). TREAT addresses key clinical questions for the management of children with severe atopic eczema using systemic medication, in particular whether there is a difference in speed of onset (how long the drug takes to start working), effectiveness, side-effect profile and reduction in flares post-treatment between CyA and MTX, and the cost-effectiveness of the drugs. Furthermore, TREAT examines how both drugs go about reducing inflammation in the body and on the skin. The study will involve 102 children aged 2 to 16 years.

**Database:** Medline

## 26. Basic Skin Care and Topical Therapies for Atopic Dermatitis: Essential Approaches and Beyond.

**Author(s):** Sala-Cunill, A; Lazaro, M; Herráez, L; Quiñones, M D; Moro-Moro, M; Sanchez, I; Skin Allergy Committee of Spanish Society of Allergy and Clinical Immunology (SEaic)

**Source:** Journal of investigational allergology & clinical immunology; Dec 2018; vol. 28 (no. 6); p. 379-391

**Publication Date:** Dec 2018

**Publication Type(s):** Journal Article

**PubMedID:** 30004024

**Abstract:**Atopic dermatitis (AD) is a recurrent and chronic skin disease characterized by dysfunction of the epithelial barrier, skin inflammation, and immune dysregulation, with changes in the skin

microbiota and colonization by *Staphylococcus aureus* being common. For this reason, the therapeutic approach to AD is complex and should be directed at restoring skin barrier function, reducing dehydration, maintaining acidic pH, and avoiding superinfection and exposure to possible allergens. There is no curative treatment for AD. However, a series of measures are recommended to alleviate the disease and enable patients to improve their quality of life. These include adequate skin hydration and restoration of the skin barrier with the use of emollients, antibacterial measures, specific approaches to reduce pruritus and scratching, wet wrap applications, avoidance of typical AD triggers, and topical anti-inflammatory drugs. Anti-inflammatory treatment is generally recommended during acute flares or, more recently, for preventive management. Nevertheless, the selection of the pharmacologic agent, as well as its potency, duration, and frequency of application must be in accordance with the severity of the disease and the distribution and type of the lesion. The objectives of this review are to emphasize the importance of basic skin care and to describe current and novel topical therapies for AD.

**Database:** Medline

### **27. Novel topical agent containing superoxide dismutase 100 000 IU and 4% of plant extracts as a mono-therapy for atopic dermatitis.**

**Author(s):** Sgouros, Dimitrios; Katoulis, Alexander; Rigopoulos, Dimitrios

**Source:** Journal of cosmetic dermatology; Dec 2018; vol. 17 (no. 6); p. 1069-1072

**Publication Date:** Dec 2018

**Publication Type(s):** Journal Article

**PubMedID:** 29134748

Available at [Journal of Cosmetic Dermatology](#) - from Wiley

Available at [Journal of Cosmetic Dermatology](#) - from EBSCO (MEDLINE Complete)

**Abstract:**INTRODUCTIONCorticosteroids are the mainstay of treatment for the acute phase of atopic dermatitis (AD), whereas topical emollients are mainly used for maintenance of remission. A topical agent that combines emollient and anti-inflammatory properties would achieve control of all phases of AD, without the need for chronic corticosteroid use.AIMTo assess the efficacy of a novel topical agent containing superoxide dismutase (SOD) 100 000 IU and 4% of a combination of plant extracts (blackcurrant seed oil, sunflower oil concentrate, balloon vine extract).METHODSTwenty patients (age range from 8 months to 72 years old) with mild-to-moderate atopic dermatitis were assessed. The product was used as mono-therapy, applied to the affected skin areas twice daily. Patients were evaluated before and after a 30-day course using the SCORAD and the Visual Analog Scale for assessment of pruritus intensity. Primary endpoint was improvement of AD according to SCORAD and clinical assessment. Secondary endpoint was patient satisfaction and improvement of pruritus.RESULTSMean SCORAD on day 0 was 32.61(range = 16.0-46.9) and decreased to 10.55 (range = 0-17.0) on day 30, reflecting a reduction of 67.6%. On day 30, all patients described significant improvement in pruritus and quality of sleep.CONCLUSIONThe application of the study product cream resulted in significant improvement of AD, as reflected by the objective SCORAD measurement, and the subjective assessment of pruritus and quality of life. This novel anti-inflammatory emollient product may emerge as a safe and effective therapeutic tool for all phases of AD without the adverse effects of chronic use of corticosteroids.

**Database:** Medline

## **28. A practical algorithm for topical treatment of atopic dermatitis in the Middle East emphasizing the importance of sensitive skin areas.**

**Author(s):** Reda, Ashraf M; Elgendi, Ayman; Ebraheem, Ahmed Ismail; Aldraibi, Mohammed S; Qari, Mohammed Saleh; Abdulghani, Magdy Mohammad R; Luger, Thomas

**Source:** The Journal of dermatological treatment; Nov 2018 ; p. 1-8

**Publication Date:** Nov 2018

**Publication Type(s):** Journal Article

**PubMedID:** 30222017

**Abstract:**Background There is a need for safe, effective treatment for atopic dermatitis (AD) in the Middle East. Objective To propose a practical algorithm for the treatment of AD throughout the Middle East. Methods An international panel of six experts from the Middle East and one from Europe developed the algorithm. The practical treatment guide was based on a review of published guidelines on AD, an evaluation of relevant literature published up to August 2016 and local treatment practices. Results Patients with an acute mild-to-moderate disease flare on sensitive body areas should apply the topical calcineurin inhibitor (TCI), pimecrolimus 1% cream twice daily until clearance. For other body locations, a TCI, either pimecrolimus 1% cream, tacrolimus 0.03% ointment in children or 0.1% ointment in adults, should be applied twice daily until clearance. Emollients should be used as needed. Patients experiencing acute severe disease flares should apply a topical corticosteroid (TCS) according to their label for a few days to reduce inflammation. After clinical improvement, pimecrolimus for sensitive skin areas or TCIs for other body locations should be used until there is a complete resolution of lesions. Conclusions These recommendations are expected to optimize AD management in patients across the Middle East.

**Database:** Medline

## **29. Associations of Eczema Severity and Parent Knowledge With Child Quality of Life in a Pediatric Primary Care Population.**

**Author(s):** Rea, Corinna J; Tran, Katherine D; Jorina, Maria; Wenren, Larissa M; Hawryluk, Elena B; Toomey, Sara L

**Source:** Clinical pediatrics; Nov 2018; vol. 57 (no. 13); p. 1506-1514

**Publication Date:** Nov 2018

**Publication Type(s):** Journal Article

**PubMedID:** 30008244

**Abstract:**We investigated factors associated with quality of life (QOL) in children with eczema. We conducted a cross-sectional analysis of survey data from 224 parents of children with eczema attending a large, hospital-based pediatric clinic. Parents completed a validated eczema severity scale (Patient-Oriented Eczema Measure), a QOL scale (Infants' Dermatitis QOL Index or Children's Dermatology Life Quality Index), and a knowledge and understanding questionnaire. In adjusted multivariate analyses, worse eczema severity was associated with worse overall QOL ( $\beta = 0.5$ ; 95% confidence interval [CI] = [0.5, 0.6]), while a higher knowledge score was associated with better QOL ( $\beta = -3.4$ ; 95% CI = [-6.6, -0.2]). Similarly, even after adjustment for eczema severity, greater understanding of a child's individual treatment plan was associated with better QOL ( $\beta = -0.7$ ; 95% CI = [-1.4, -0.08]), while increased frequency of worrying about a child's eczema was associated with worse QOL ( $\beta = 0.7$ ; 95% CI = [0.03, 1.1]). These results suggest primary care providers may be able to influence QOL through optimal eczema management and family education.

**Database:** Medline

### **30. Cost and effectiveness of prescribing emollient therapy for atopic eczema in UK primary care in children and adults: a large retrospective analysis of the Clinical Practice Research Datalink.**

**Author(s):** Moncrieff, George; Lied-Lied, Annie; Nelson, Gill; Holy, Chantal E; Weinstein, Rachel; Wei, David; Rowe, Simon

**Source:** BMC dermatology; Oct 2018; vol. 18 (no. 1); p. 9

**Publication Date:** Oct 2018

**Publication Type(s):** Journal Article

**PubMedID:** 30373584

Available at [BMC dermatology](#) - from ProQuest (Hospital Premium Collection) - NHS Version

Available at [BMC dermatology](#) - from BioMed Central

Available at [BMC dermatology](#) - from Europe PubMed Central - Open Access

Available at [BMC dermatology](#) - from EBSCO (MEDLINE Complete)

**Abstract:**BACKGROUNDThe Clinical Practice Research Datalink (CPRD) was used to evaluate the overall costs to the National Health Service, including healthcare utilisation, of prescribing emollients in UK primary care for dry skin and atopic eczema (DS&E).METHODSPrimary care patients in the UK were identified using the CPRD and their records were interrogated for the 2 years following first diagnosis of DS&E. Data from patients with (n = 45,218) and without emollient prescriptions (n = 9780) were evaluated. Multivariate regression models were used to compare healthcare utilisation and cost in the two matched groups (age, sex, diagnosis). Two sub-analyses of the Emollient group were performed between matched groups receiving (1) a colloidal oatmeal emollient (Aveeno-First) versus non-colloidal oatmeal emollients (Aveeno-Never) and (2) Aveeno prescribed first-line (Aveeno-First) versus prescribed Aveeno later (Aveeno-Subsequently). Logistic regression models calculated the odds of prescription with either potent / very potent topical corticosteroids (TCS) or skin-related antimicrobials.RESULTSCosts per patient were £125.80 in Emollient (n = 7846) versus £128.13 in Non-Emollient (n = 7846) matched groups (p = 0.08). The Emollient group had fewer visits/patient (2.44 vs. 2.66; p < 0.0001) and lower mean per-visit costs (£104.15 vs. £113.25; p < 0.0001), compared with the Non-Emollient group. Non-Emollient patients had 18% greater odds of being prescribed TCS and 13% greater odds of being prescribed an antimicrobial than Emollient patients. In the Aveeno-First (n = 1943) versus Aveeno-Never (n = 1943) sub-analysis, costs per patient were lower in the Aveeno-First compared with the Aveeno-Never groups (£133.46 vs. £141.11; p = 0.0069). The Aveeno-Never group had ≥21% greater odds of being prescribed TCS or antimicrobial than the Aveeno-First group. In the Aveeno-First (n = 1357) versus Aveeno-Subsequently (n = 1357) sub-analysis, total costs were lower in the Aveeno-First group (£140.35 vs. £206.43; p < 0.001). Patients in the Aveeno-Subsequently group had 91% greater odds of being prescribed TCS and 75% greater odds of being prescribed an antimicrobial than the Aveeno-First group.CONCLUSIONSAcknowledging limitations from unknown disease severity in the CRPD, the prescription of emollients to treat DS&E was associated with fewer primary care visits, reduced healthcare utilisation and reduced cost. Prescribing emollients, especially those containing colloidal oatmeal, was associated with fewer TCS and antimicrobial prescriptions.TRIAL REGISTRATIONThe study is registered at <http://isrctn.com/ISRCTN91126037> .

**Database:** Medline

### **31. Leukotriene receptor antagonists for eczema.**

**Author(s):** Ferguson, Leila; Futamura, Masaki; Vakirlis, Efstratios; Kojima, Reiji; Sasaki, Hatoko; Roberts, Amanda; Mori, Rintaro

**Source:** The Cochrane database of systematic reviews; Oct 2018; vol. 10 ; p. CD011224

**Publication Date:** Oct 2018

**Publication Type(s):** Research Support, Non-u.s. Gov't Journal Article Review

**PubMedID:** 30343498

Available at [The Cochrane database of systematic reviews](#) - from Cochrane Collaboration (Wiley)

**Abstract:**BACKGROUND Eczema is a common, chronic, inflammatory skin condition that is frequently associated with atopic conditions, including asthma. Leukotriene receptor antagonists (LTRAs) have a corticosteroid-sparing role in asthma, but their role in eczema remains controversial. Currently available topical therapies for eczema are often poorly tolerated, and use of systemic agents is restricted by their adverse effect profile. A review of alternative treatments was therefore warranted. OBJECTIVE To assess the possible benefits and harms of leukotriene receptor antagonists for eczema. SEARCH METHODS We searched the following databases to September 2017: the Cochrane Skin Specialised Register, CENTRAL, MEDLINE, Embase, and the GREAT database. We also searched five trial registries, and handsearched the bibliographies of all extracted studies for further relevant trials. SELECTION CRITERIA Randomised controlled trials of LTRAs alone or in combination with other (topical or systemic) treatments compared with other treatments alone such as topical corticosteroids or placebo for eczema in the acute or chronic (maintenance) phase of eczema in adults and children. DATA COLLECTION AND ANALYSIS We used the standard methodological procedures expected by Cochrane. The primary outcome measures were change in disease severity, long-term symptom control, and adverse effects of treatment. Secondary outcomes were change in corticosteroid requirement, reduction of pruritis, quality of life, and emollient requirement. We used GRADE to assess the quality of the evidence for each outcome. MAIN RESULTS Only five studies (including a total of 202 participants) met the inclusion criteria, all of which assessed oral montelukast; hence, we found no studies assessing other LTRAs. Treatment ranged from four to eight weeks, and outcomes were assessed at the end of treatment; therefore, we could only report short-term measurements (defined as less than three months follow-up from baseline). Montelukast dosing was 10 mg for adults (age 14 years and above) and 5 mg for children (age 6 years to 14 years). One study included children (aged 6 years and above) among their participants, while the remaining studies only included adults (participant age ranged from 16 to 70 years). The participants were diagnosed with moderate-to-severe eczema in four studies and moderate eczema in one study. The study setting was unclear in two studies, multicentre in two studies, and single centre in one study; the studies were conducted in Europe and Bangladesh. Two studies were industry funded. The comparator was placebo in three studies and conventional treatment in two studies. The conventional treatment comparator was a combination of antihistamines and topical corticosteroids (plus oral antibiotics in one study). Four of the studies did not adequately describe their randomisation or allocation concealment method and were considered as at unclear risk of selection bias. Only one study was at low risk of performance and detection bias. However, we judged all studies to be at low risk of attrition and reporting bias. We found no evidence of a difference in disease severity of moderate-to-severe eczema after short-term use of montelukast (10 mg) when compared with placebo. The outcome was assessed using the modified EASI (Eczema Area and Severity Index) score and SASSAD (Six Area, Six Sign Atopic Dermatitis) severity score (standardised mean difference 0.29, with a positive score showing montelukast is favoured, 95% confidence interval (CI) -0.23 to 0.81; 3 studies; n = 131; low-quality evidence). When short-term montelukast (10 mg) treatment was compared with conventional treatment in one study, the mean improvement in severity of moderate-to-severe eczema was greater in the intervention group (measured using SCORAD (SCORing of Atopic Dermatitis) severity index) (mean difference 10.57, 95% CI 4.58 to 16.56;

n = 31); however, another study of 32 participants found no significant difference between groups using the same measure (mean improvement was 25.2 points with montelukast versus 23.9 points with conventional treatment; no further numerical data provided). We judged the quality of the evidence as very low for this outcome, meaning the results are uncertain. All studies reported their adverse event rate during treatment. Four studies (136 participants) reported no adverse events. In one study of 58 participants with moderate eczema who received montelukast 10 mg (compared with placebo), there was one case of septicaemia and one case of dizziness reported in the intervention group, both resulting in study withdrawal, although whether these effects were related to the medication is unclear. Mild side effects (e.g. headache and mild gastrointestinal disturbances) were also noted, but these were fairly evenly distributed between the montelukast and placebo groups. The quality of evidence for this outcome was low. No studies specifically evaluated emollient requirement or quality of life. One study that administered treatment for eight weeks specifically evaluated pruritus improvement at the end treatment and topical corticosteroid use during treatment. We found no evidence of a difference between montelukast (10 mg) and placebo for both outcomes (low-quality evidence, n = 58). No other study assessed these outcomes.

**AUTHORS' CONCLUSION** The findings of this review are limited to montelukast. There was a lack of evidence addressing the review question, and the quality of the available evidence for most of the measured outcomes was low. Some primary and secondary outcomes were not addressed at all, including long-term control. We found no evidence of a difference between montelukast (10 mg) and placebo on disease severity, pruritus improvement, and topical corticosteroid use. Very low-quality evidence means we are uncertain of the effect of montelukast (10 mg) compared with conventional treatment on disease severity. Participants in only one study reported adverse events, which were mainly mild (low-quality evidence). There is no evidence that LTRA is an effective treatment for eczema. Serious limitations were that all studies focused on montelukast and only included people with moderate-to-severe eczema, who were mainly adults; and that each outcome was evaluated with a small sample size, if at all. Further large randomised controlled trials, with a longer treatment duration, of adults and children who have eczema of all severities may help to evaluate the effect of all types of LTRA, especially on eczema maintenance.

**Database:** Medline

### **32. Survey of disease awareness, treatment behavior and treatment satisfaction in patients with atopic dermatitis in Korea: A multicenter study.**

**Author(s):** Jung, Hye Jung; Bae, Joo Youn; Kim, Jung Eun; Na, Chan Ho; Park, Gyeong Hun; Bae, You In; Shin, Min Kyung; Lee, Young Bok; Lee, Un Ha; Jang, Yong Hyun; Han, Tae Young; Ahn, Ji Young

**Source:** The Journal of dermatology; Oct 2018; vol. 45 (no. 10); p. 1172-1180

**Publication Date:** Oct 2018

**Publication Type(s):** Journal Article

**PubMedID:** 30019780

Available at [The Journal of dermatology](#) - from Wiley

**Abstract:** In Korea, there is a high dependency on oriental medicine and folk remedies (Korean J Asthma Allergy Clin Immunol, 25, 2005, 110). In addition, inaccurate information available through the Internet is increasing (Korean J Dermatol, 44, 2006, 137). So, there is always a possibility that patients may have difficulty obtaining accurate information about atopic dermatitis (AD). The aim was to determine the awareness, treatment behavior and treatment satisfaction of patients with AD and their caregivers. In October 2017, patients diagnosed with AD at nine hospitals were enrolled in this study. A questionnaire was completed by each patient. A total of 371 subjects were surveyed. In

response to the question asking about knowledge of AD, the correct answer rate was 55.4%. Bathing using soap, body scrub and moisturizer showed favorable outcomes. A total of 54.9% patients responded that they were reluctant to use steroid ointment. When asked about their previous treatment, 39.6% reported using oriental medicine and 26.5% had tried folk remedies. The hospital treatment satisfaction score was 6.6. Patients usually applied their knowledge in their daily lives. However, there was a lot of inaccurate knowledge. Therefore, it is important for patients to understand the characteristics of this disease and obtain correct information.

**Database:** Medline

### **33. The widespread use of topical antimicrobials enriches for resistance in *Staphylococcus aureus* isolated from patients with atopic dermatitis.**

**Author(s):** Harkins, C P; McAleer, M A; Bennett, D; McHugh, M; Fleury, O M; Pettigrew, K A; Oravcová, K; Parkhill, J; Proby, C M; Dawe, R S; Geoghegan, J A; Irvine, A D; Holden, M T G

**Source:** The British journal of dermatology; Oct 2018; vol. 179 (no. 4); p. 951-958

**Publication Date:** Oct 2018

**Publication Type(s):** Journal Article

**PubMedID:** 29729180

Available at [British Journal of Dermatology](#) - from Wiley

Available at [British Journal of Dermatology](#) - from Unpaywall

**Abstract:**BACKGROUND Carriage rates of *Staphylococcus aureus* on affected skin in atopic dermatitis (AD) are approximately 70%. Increasing disease severity during flares and overall disease severity correlate with increased burden of *S. aureus*. Treatment in AD therefore often targets *S. aureus* with topical and systemic antimicrobials. OBJECTIVES To determine whether antimicrobial sensitivities and genetic determinants of resistance differed in *S. aureus* isolates from the skin of children with AD and healthy child nasal carriers. METHODS In this case-control study, we compared *S. aureus* isolates from children with AD (n = 50) attending a hospital dermatology department against nasal carriage isolates from children without skin disease (n = 49) attending a hospital emergency department for noninfective conditions. Using whole genome sequencing we generated a phylogenetic framework for the isolates based on variation in the core genome, then compared antimicrobial resistance phenotypes and genotypes between disease groups. RESULTS *Staphylococcus aureus* from cases and controls had on average similar numbers of phenotypic resistances per isolate. Case isolates differed in their resistance patterns, with fusidic acid resistance (FusR) being significantly more frequent in AD (P = 0.009). The genetic basis of FusR also differentiated the populations, with chromosomal mutations in *fusA* predominating in AD (P = 0.049). Analysis revealed that FusR evolved multiple times and via multiple mechanism in the population. Carriage of plasmid-derived *qac* genes, which have been associated with reduced susceptibility to antiseptics, was eight times more frequent in AD (P = 0.016). CONCLUSION The results suggest that strong selective pressure drives the emergence and maintenance of specific resistances in AD.

**Database:** Medline

### **34. The effects of season and weather on healthcare utilization among patients with atopic dermatitis.**

**Author(s):** Hamann, C R; Andersen, Y M F; Engebretsen, K A; Skov, L; Silverberg, J I; Egeberg, A; Thyssen, J P

**Source:** Journal of the European Academy of Dermatology and Venereology : JEADV; Oct 2018; vol. 32 (no. 10); p. 1745-1753

**Publication Date:** Oct 2018

**Publication Type(s):** Journal Article

**PubMedID:** 29706020

Available at [Journal of the European Academy of Dermatology and Venereology](#) - from Wiley

**Abstract:**BACKGROUND Patient-reported triggers for atopic dermatitis (AD) flares include changes in ultraviolet irradiation, humidity and temperature. OBJECTIVE To identify the relationships between weather data and healthcare utilization in AD patients. METHODS Using nationwide healthcare registries, clinic (1994-2012) and hospital visits (1977-2012) for AD treatment were calculated as well as monthly totals of topical corticosteroid (TCS) (1996-2012) and calcineurin inhibitor (TCI) prescriptions (2003-2012) filled by AD patients. We calculated monthly averages of temperature, atmospheric pressure, cloud cover and hours of bright sunlight and compared these variables to healthcare utilization endpoints, for the years 2000-2012 (n = 156 months), using linear regression models. RESULTS In Denmark, between the year 2000 and 2012, mean monthly totals of AD emergency room visits were 6, AD hospitalizations 32, AD outpatient visits 170, TCS prescriptions filled by AD patients 3811 and TCI prescriptions 2552. Healthcare utilization among AD patients was highest in winter/spring. Temperature was the environmental variable that had the strongest association with healthcare utilization: per 1°C lower monthly temperature, 2 more (95% confidence interval [CI] 1-4) AD clinic/hospital visits hospitalizations were observed, 18 (95% CI 9-26) more TCS prescriptions and 53 (95% CI 36-70) more TCI prescriptions were filled by patients with AD. Environmental variables were highly correlated. Associations between AD healthcare utilization and hours of cloud cover were generally positive, while those with hours of bright sunlight were generally inverse. CONCLUSION SAD healthcare utilization markers changed significantly with season. A decline in temperature correlated well with AD patients' healthcare utilization, but a causative role could not be determined with certainty.

**Database:** Medline

### **35. Adding emollient bath additives to standard eczema management for children with eczema: the BATHE RCT.**

**Author(s):** Santer, Miriam; Rumsby, Kate; Ridd, Matthew J; Francis, Nick A; Stuart, Beth; Chorozoglou, Maria; Roberts, Amanda; Liddiard, Lyn; Nollett, Claire; Hooper, Julie; Prude, Martina; Wood, Wendy; Thomas-Jones, Emma; Becque, Taeko; Thomas, Kim S; Williams, Hywel C; Little, Paul

**Source:** Health technology assessment (Winchester, England); Oct 2018; vol. 22 (no. 57); p. 1-116

**Publication Date:** Oct 2018

**Publication Type(s):** Research Support, Non-u.s. Gov't Clinical Trial

**PubMedID:** 30362939

**Abstract:**BACKGROUND Childhood eczema is very common. Treatment often includes emollient bath additives, despite there being little evidence of their effectiveness. OBJECTIVE To determine the clinical effectiveness and cost-effectiveness of emollient bath additives in the management of childhood eczema. DESIGN Pragmatic, randomised, open-label, multicentre superiority trial with two parallel groups. SETTING Ninety-six general practices in Wales, the west of England and southern England. Invitation by personal letter or opportunistically. PARTICIPANTS Children aged between 12 months and 12 years fulfilling the UK Diagnostic Criteria for Atopic Eczema. Children with inactive or very mild eczema (a score of ≤ 5 on the Nottingham Eczema Severity Scale) were excluded, as were

children who bathed less than once per week or whose parents/carers were not prepared to accept randomisation. **INTERVENTION** The intervention group were prescribed bath additives by their usual clinical team and were asked to use them regularly for 12 months. The control group were asked to use no bath additives for 12 months. Both groups continued standard eczema management, including regular leave-on emollients and topical corticosteroids (TCSs) when required. **MAIN OUTCOME MEASURE** The primary outcome was eczema control measured by Patient Oriented Eczema Measure [POEM, 0 (clear) to 28 (severe)] weekly for 16 weeks. The secondary outcomes were eczema severity over 1 year (4-weekly POEM), number of eczema exacerbations, disease-specific quality of life (QoL) (Dermatitis Family Impact Questionnaire), generic QoL (Child Health Utility-9 Dimensions) and type and quantity of topical steroid/calcineurin inhibitors prescribed. Children were randomised (1 : 1) using online software to either bath additives plus standard eczema care or standard eczema care alone, stratified by recruiting centre, and there was open-label blinding. **RESULTS** From December 2014 to May 2016, 482 children were randomised: 51% were female, 84% were white and the mean age was 5 years (n = 264 in the intervention group, n = 218 in the control group). Reported adherence to randomised treatment allocation was > 92% in both groups, with 76.7% of participants completing at least 12 (80%) of the first 16 weekly questionnaires for the primary outcome. Baseline POEM score was 9.5 [standard deviation (SD) 5.7] in the bath additives group and 10.1 (SD 5.8) in the no bath additives group. Average POEM score over the first 16 weeks was 7.5 (SD 6.0) in the bath additives group and 8.4 (SD 6.0) in the no bath additives group, with no statistically significant difference between the groups. After controlling for baseline severity and confounders (ethnicity, TCS use, soap substitute use) and allowing for clustering of participants within centres and responses within participants over time, POEM scores in the no bath additive group were 0.41 points higher than in the bath additive group (95% confidence interval -0.27 to 1.10), which is well below the published minimal clinically important difference of 3 points. There was no difference between groups in secondary outcomes or in adverse effects such as redness, stinging or slipping. **LIMITATION** Simple randomisation resulted in an imbalance in baseline group size, although baseline characteristics were well balanced between groups. **CONCLUSION** This trial found no evidence of clinical benefit of including emollient bath additives in the standard management of childhood eczema. **FUTURE WORK** Further research is required on optimal regimens of leave-on emollients and the use of emollients as soap substitutes. **TRIAL REGISTRATION** Current Controlled Trials ISRCTN84102309. **FUNDING** This project was funded by the NIHR Health Technology Assessment Programme and will be published in full in Health Technology Assessment; Vol. 22, No. 57. See the NIHR Journals Library website for further project information.

**Database:** Medline

### **36. Two Cases of Dermatitis Herpetiformis Successfully Treated with Tetracycline and Niacinamide.**

**Author(s):** Wang, Yaru; Yang, Baoqi; Zhou, Guizhi; Zhang, Furen

**Source:** Acta dermatovenerologica Croatica : ADC; Oct 2018; vol. 26 (no. 3); p. 273-275

**Publication Date:** Oct 2018

**Publication Type(s):** Journal Article

**PubMedID:** 30390734

Available at [Acta dermatovenerologica Croatica : ADC](#) - from EBSCO (MEDLINE Complete)

**Abstract:** Dear Editor, Dermatitis herpetiformis (DH) is a chronic, polymorphic, pruritic autoimmune blistering skin disease characterized by subepidermal blisters, neutrophilic microabscesses, and granular IgA deposition within the dermal papillae. DH is classified as a cutaneous manifestation of

coeliac disease, a type of gluten-sensitive enteropathy (1). The treatment of DH includes dapsone and a gluten-free diet (GFD). Other therapies should be considered in patients who are unable to tolerate dapsone, including sulfapyridine and glucocorticoids. Herein we present two cases of DH with good responses to tetracycline and niacinamide combination therapy. Case 1 was a 42-year-old man who was admitted to our hospital with a 3-year history of recurrent pruritic papules and bullous lesions involving the trunk and upper limbs. On examination, the patient showed disseminated erythematous papules on the upper limbs and back as well as vesicles. Nikolsky's sign for vesicles was negative (Figure 1, a-c). The results of routine blood examinations were within normal ranges. He did not have a history of chronic diarrhea. The histologic examination showed subepidermal blisters and accumulation of neutrophils at the papillary dermis of the involved skin. Direct immunofluorescence revealed fibrillar deposition of IgA on the dermal papillae (Figure 1. g, h). Case 2 was a 34-year-old woman who had a history of skin rash and pruritic lesions predominantly involving the arms and legs, which had been present for 10 months. She had been treated with prednisone (30 mg daily) with improvement; however, the lesions reappeared when the prednisone was discontinued. She had a history of constipation. On physical examination, the skin lesions manifested as erythematous papules, vesicles, and scabs on the limbs (Figure 2. a-c). She felt apparently pruritic. The histologic examination of the biopsy identified subepidermal blisters with a neutrophil infiltrate in the upper dermis. Direct immunofluorescence revealed granular deposition of IgA on the dermal papillae (Figure 2. e, f). The results of routine blood examinations were within normal ranges, with the exception of elevated IgE concentration (222.5 ku/L (normal range, 0-100 ku/L)). The clinical manifestations and histologic and immunofluorescence examinations of the two cases confirmed the diagnosis of DH. The two patients were subsequently started on a strict GFD. At that time, dapsone was not available in the hospital. The patients were treated with oral tetracycline (500 mg four times daily) and nicotinamide (500 mg three times daily). The rash affecting case 1 resolved entirely in 2 weeks. The patient discontinued the medications after 6 months, and occasionally presented with a few pruritic papules and vesicles, but the lesions resolved within 1 week. The lesions affecting case 2 completely healed within 1 month. The patient continued taking those medications and no recurrence of the skin lesions occurred during 2 years of follow-up. Dapsone is considered first-line therapy for patients with DH (2). Recent findings have shown dapsone and lower dosages of sulfasalazine combination therapy in DH are effective and well-tolerated (3). Alternative monotherapeutic agents in mild autoimmune bullous diseases such as DH include a tetracycline group of antibiotics with niacinamide or its derivatives as well as sulfasalazine. Because dapsone is difficult to obtain in China except for patients with leprosy, we treated the patients with tetracycline and nicotinamide. To our knowledge, only a few cases of DH have been successfully treated with oral tetracycline and niacinamide (2,4). One of the patients was also prescribed heparin (4). Tetracycline has anti-inflammatory properties due to the inhibition of metalloproteinase activity and mast cell activation (5). Nicotinamide is a potent modulator of several pro-inflammatory cytokines. Nicotinamide can inhibit cytokine release (IL-1, IL-6, IL-8, and TNF- $\alpha$ ) from immune cells, inhibit chemotaxis and degranulation of immune cells, inhibit lymphocyte blast transformation, and suppress T-cell activity (6). The non-antibiotic properties of tetracycline in combination with nicotinamide may participate in inhibition of antibody formation, modulation of pro-inflammatory cytokines, inflammatory cell accumulation, lymphocyte transformation, and T-cell activation. In summary, we reported two typical cases of DH that were successfully treated with oral tetracycline and niacinamide, which completely healed the rash and relieved the symptoms within 1 month. The combination of tetracycline and nicotinamide can be recommended as a useful therapy for patients where dapsone is not available or for patients who do not tolerate dapsone.

**Database:** Medline

### **37. Adding emollient bath additives to standard eczema management for children with eczema: The BATHE RCT**

**Author(s):** Santer M.; Rumsby K.; Stuart B.; Hooper J.; Prude M.; Becque T.; Little P.; Ridd M.J.; Liddiard L.; Francis N.A.; Thomas-Jones E.; Chorooglou M.; Roberts A.; Thomas K.S.; Williams H.C.; Nollett C.; Wood W.

**Source:** Health Technology Assessment; Oct 2018; vol. 22 (no. 57); p. 1-116

**Publication Date:** Oct 2018

**Publication Type(s):** Article

**PubMedID:** 30362939

**Abstract:**Background: Childhood eczema is very common. Treatment often includes emollient bath additives, despite there being little evidence of their effectiveness. Objective(s): To determine the clinical effectiveness and cost-effectiveness of emollient bath additives in the management of childhood eczema. Design(s): Pragmatic, randomised, open-label, multicentre superiority trial with two parallel groups. Setting(s): Ninety-six general practices in Wales, the west of England and southern England. Invitation by personal letter or opportunistically. Participant(s): Children aged between 12 months and 12 years fulfilling the UK Diagnostic Criteria for Atopic Eczema. Children with inactive or very mild eczema (a score of  $\leq 5$  on the Nottingham Eczema Severity Scale) were excluded, as were children who bathed less than once per week or whose parents/ carers were not prepared to accept randomisation. Intervention(s): The intervention group were prescribed bath additives by their usual clinical team and were asked to use them regularly for 12 months. The control group were asked to use no bath additives for 12 months. Both groups continued standard eczema management, including regular leave-on emollients and topical corticosteroids (TCSs) when required. Main Outcome Measure(s): The primary outcome was eczema control measured by Patient Oriented Eczema Measure [POEM, 0 (clear) to 28 (severe)] weekly for 16 weeks. The secondary outcomes were eczema severity over 1 year (4-weekly POEM), number of eczema exacerbations, disease-specific quality of life (QoL) (Dermatitis Family Impact Questionnaire), generic QoL (Child Health Utility-9 Dimensions) and type and quantity of topical steroid/calcineurin inhibitors prescribed. Children were randomised (1: 1) using online software to either bath additives plus standard eczema care or standard eczema care alone, stratified by recruiting centre, and there was open-label blinding. Result(s): From December 2014 to May 2016, 482 children were randomised: 51% were female, 84% were white and the mean age was 5 years ( $n = 264$  in the intervention group,  $n = 218$  in the control group). Reported adherence to randomised treatment allocation was  $> 92\%$  in both groups, with 76.7% of participants completing at least 12 (80%) of the first 16 weekly questionnaires for the primary outcome. Baseline POEM score was 9.5 [standard deviation (SD) 5.7] in the bath additives group and 10.1 (SD 5.8) in the no bath additives group. Average POEM score over the first 16 weeks was 7.5 (SD 6.0) in the bath additives group and 8.4 (SD 6.0) in the no bath additives group, with no statistically significant difference between the groups. After controlling for baseline severity and confounders (ethnicity, TCS use, soap substitute use) and allowing for clustering of participants within centres and responses within participants over time, POEM scores in the no bath additive group were 0.41 points higher than in the bath additive group (95% confidence interval -0.27 to 1.10), which is well below the published minimal clinically important difference of 3 points. There was no difference between groups in secondary outcomes or in adverse effects such as redness, stinging or slipping. Limitation(s): Simple randomisation resulted in an imbalance in baseline group size, although baseline characteristics were well balanced between groups. Conclusion(s): This trial found no evidence of clinical benefit of including emollient bath additives in the standard management of childhood eczema. Future work: Further research is required on optimal regimens of leave-on emollients and the use of emollients as soap substitutes. Copyright © Queen's Printer and Controller of HMSO 2018.

**Database:** EMBASE

**38. Pregnancy complications, treatment characteristics and birth outcomes in women with atopic dermatitis in Denmark.**

**Author(s):** Hamann, C R; Egeberg, A; Wollenberg, A; Gislason, G; Skov, L; Thyssen, J P

**Source:** Journal of the European Academy of Dermatology and Venereology : JEADV; Sep 2018

**Publication Date:** Sep 2018

**Publication Type(s):** Journal Article

**PubMedID:** 30242910

Available at [Journal of the European Academy of Dermatology and Venereology : JEADV](#) - from Wiley

**Abstract:**BACKGROUNDThe risk of prenatal, obstetric and birth complications in mothers with atopic dermatitis (AD), along with treatment use during pregnancy, is unknown.OBJECTIVESTo examine the associations between prenatal, obstetric and birth complications in mothers with AD and describe the dermatologic care received during pregnancy.METHODSMother-child pairs, in which the mother had a history of AD, were identified through the Danish Medical Birth Registry and matched 1 : 10 with non-AD pairs. Data on dermatologic treatment and prenatal, obstetric and birth complications were obtained through linkage via nationwide registers. Multiple logistic regression was performed.RESULTSWe identified 10 668 births from 1997 through 2014 to women with AD. Women with a hospital/ambulatory contact for AD during pregnancy had increased topical corticosteroid and ultraviolet therapy use during pregnancy compared to prior. However, overall, women with AD received decreased dermatologic therapy during pregnancy compared to prior. In adjusted analysis, maternal AD was inversely associated with gestational diabetes [OR 0.79, 95% CI (0.68-0.92)], but positively associated with premature rupture of membranes [1.15 (1.05-1.27)] and staphylococcal neonatal septicemia [2.45 (1.33-4.49)]-albeit the latter was rare. These associations did not meet statistical significance in sub-analysis where body mass index data were available. No associations were found with preeclampsia, prematurity or non-staphylococcal neonatal septicaemia.CONCLUSIONSWomen with AD during pregnancy mainly used topical corticosteroids and ultraviolet therapy to control their disease. While premature rupture of membranes and staphylococcal neonatal septicaemia were over-represented in maternal AD, no associations were found with any other significant prenatal, obstetric or birth outcome.

**Database:** Medline

**39. Individuals with filaggrin-related eczema and asthma have increased long-term medication and hospital admission costs.**

**Author(s):** Soares, P; Fidler, K; Felton, J; Tavendale, R; Hövels, A; Bremner, S A; Palmer, C N A; Mukhopadhyay, S

**Source:** The British journal of dermatology; Sep 2018; vol. 179 (no. 3); p. 717-723

**Publication Date:** Sep 2018

**Publication Type(s):** Journal Article

**PubMedID:** 29851030

Available at [British Journal of Dermatology](#) - from Wiley

Available at [British Journal of Dermatology](#) - from Unpaywall

**Abstract:**BACKGROUND Eczema and asthma are chronic diseases with onset usually before the age of 5 years. More than 50% of individuals with eczema will develop asthma and/or other allergic diseases. Several loss-of-function mutations in filaggrin (FLG) have been identified in patients with eczema. However, the association of FLG with healthcare use is unknown. OBJECTIVES To determine whether FLG mutations are associated with increased prescribing for eczema and asthma and whether increased prescribing is associated with increased healthcare costs. METHODS A secondary analysis of BREATHE, a cross-sectional study of gene-environment associations with asthma severity, was undertaken. BREATHE data was collected for 1100 participants with asthma, in Tayside and Fife, Scotland during the period 2003-2005. Through collaboration with the Health Informatics Centre in Dundee, BREATHE was linked to accident and emergency, community prescribing and Scottish morbidity records. The data linkage allowed longitudinal exploration of associations between genetic variation and prescribing. RESULTS An association was found between FLG mutations and increased prescribing for mild and moderate eczema, asthma-reliever medicine and asthma exacerbations. A strong association was found between FLG mutations and prescribing of emollients [incidence rate ratio (IRR) 2.19, 95% confidence interval (CI) 1.36-3.52], treatment for severe eczema (IRR 2.18, 95% CI 1.22-3.91) and a combination of a long-acting  $\beta_2$ -agonist and corticosteroids (IRR 3.29, 95% CI 1.68-6.43). CONCLUSION The presence of FLG mutations in this cohort is associated with increased prescribing for eczema and asthma. Randomized controlled trials are required to determine if these individuals could benefit from management strategies to reduce morbidity and treatment costs.

**Database:** Medline

#### **40. A randomized, open-label study to evaluate an intermittent dosing regimen of fluticasone propionate 0.05% cream in combination with regular emollient skin care in reducing the risk of relapse in pediatric patients with stabilized atopic dermatitis.**

**Author(s):** Liu, Lian; Ong, Gary

**Source:** The Journal of dermatological treatment; Aug 2018; vol. 29 (no. 5); p. 501-509

**Publication Date:** Aug 2018

**Publication Type(s):** Randomized Controlled Trial Journal Article

**PubMedID:** 29164960

**Abstract:**BACKGROUND Atopic dermatitis (AD) is a chronic, relapsing disease that requires maintenance treatment. This study examined the efficacy and safety of extended intermittent fluticasone propionate (FP) 0.05% cream, with emollient, vs emollient alone in children with AD. METHODS Eligible patients (aged 1-17 years) received FP 0.05% cream twice daily for 4 weeks (acute phase) then randomized (1:1) to FP 0.05% cream once daily, twice per week plus emollient (Group A) or emollient alone (Group B) for up to 20 weeks (maintenance phase). Primary endpoint was time to first AD relapse. Safety was assessed throughout. RESULTS This study enrolled 123 patients into the acute phase, of whom 107 entered the maintenance phase (Group A: 54; Group B: 53). Three patients (5.6%) in Group A and 30 (56.6%) in Group B experienced relapse (maintenance phase). Due to a low number of relapses, median time to first relapse could not be calculated for Group A; in Group B, it was 142 d (95% CI: 50, 150;  $p < .0001$  vs Group A). FP and emollient were well tolerated. CONCLUSION In pediatric patients with stabilized AD, FP 0.05% cream plus emollient (for AD maintenance treatment) significantly reduced the risk of relapse vs emollient alone.

**Database:** Medline

**41. Adolescents' Perspectives on Atopic Dermatitis Treatment-Experiences, Preferences, and Beliefs.**

**Author(s):** Kosse, Richelle C; Bouvy, Marcel L; Daanen, Maud; de Vries, Tjalling W; Koster, Ellen S

**Source:** JAMA dermatology; Jul 2018; vol. 154 (no. 7); p. 824-827

**Publication Date:** Jul 2018

**Publication Type(s):** Journal Article

**PubMedID:** 29847623

Available at [JAMA Dermatology](#) - from EBSCO (MEDLINE Complete)

**Abstract:** Importance For a considerable proportion of pediatric patients, atopic dermatitis symptoms persist into adolescence. Previous studies have focused mainly on (parents of) children, whereas little is known about adolescents with atopic dermatitis. Objective To explore the beliefs, experiences, and preferences of adolescents with atopic dermatitis toward their treatment. Design, Setting, and Participants We conducted a qualitative study employing focus group interviews of 15 adolescents (aged 12-18 years) who collected at least 1 prescription for topical corticosteroids in class 2 (moderately potent) or 3 (potent) in the preceding year. The study included 9 community pharmacies in 3 different regions in the Netherlands. Data were collected from November to December 2016, until data saturation was reached. Focus groups were recorded, transcribed verbatim, and data were analyzed by 2 researchers. Main Outcomes and Measures Adolescents' beliefs, experiences, and preferences toward their atopic dermatitis treatment were explored during focus groups. We used a thick analysis approach to analyze the transcripts; both deductive and inductive coding were used to analyze the transcripts. Results Three focus groups including 15 adolescents (8 male) with a mean age of 15.3 (range, 12-18) years were conducted. Adolescents were in general satisfied with the efficacy of the treatment; however, they prefer a faster and more persistent effect. Most adolescents had little contact with their physicians and did not completely adhere to the prescribed medication regimen; they developed their own routine of using topical corticosteroids in combination with emollients and moisturizers. They also seemed to have incorrect beliefs about the mechanism of action. Conclusions and Relevance Adolescents developed their own way of using topical treatment for atopic dermatitis. Some practical suggestions were mentioned to improve medication use. Health care providers should devote special attention to adolescents with atopic dermatitis to make them more aware of the principles of topical treatment and ensure proper use.

**Database:** Medline

**42. UVA-1 phototherapy for the management of atopic dermatitis: a large retrospective study conducted in a low-middle income country.**

**Author(s):** Ordóñez Rubiano, María F; Arenas, Claudia M; Chalela, Juan G

**Source:** International journal of dermatology; Jul 2018; vol. 57 (no. 7); p. 799-803

**Publication Date:** Jul 2018

**Publication Type(s):** Journal Article Observational Study

**PubMedID:** 29700815

Available at [International journal of dermatology](#) - from Wiley

**Abstract:**BACKGROUND Medium-dose ultraviolet light A - 1 (UVA-1) phototherapy, given in short courses, has shown efficacy in atopic dermatitis flares; little is known about its use, efficacy, and side effects in prolonged exposure used in the chronic disease despite its extensive use. METHODS A descriptive retrospective study was conducted; convenience sampling of patients with atopic dermatitis treated with UVA-1 phototherapy was made; evaluation of clinical response by SCORAD, adverse effects, and protocols used in each patient were evaluated. RESULTS Patients exposed to UVA-1 phototherapy showed a decrease in the SCORAD (30.1 points) - total cumulative dose-dependent ( $P < 0.0001$ ) - regardless of multiple variables studied. There were low rates of relapse and adverse effects. The most frequent doses were 30 and 60 J/cm<sup>2</sup>, three times per week; patients had similar clinical responses and adverse effects in these groups independent of the other variables studied ( $P = 0.057$ ). CONCLUSION UVA-1 phototherapy can be an alternative for patients with severe atopic dermatitis even at lower doses than those described in other series (30 J/cm<sup>2</sup>) and not only for acute flares. Cumulative total dose is a variable that affects the clinical response directly. Large prospective studies are needed.

**Database:** Medline

#### 43. Influence of topical steroids on intraocular pressure in patients with atopic dermatitis.

**Author(s):** Tamagawa-Mineoka, Risa; Yasuoka, Naoko; Ueta, Mayumi; Katoh, Norito

**Source:** Allergology international : official journal of the Japanese Society of Allergology; Jul 2018; vol. 67 (no. 3); p. 388-391

**Publication Date:** Jul 2018

**Publication Type(s):** Journal Article

**PubMedID:** 29456116

Available at [Allergology International](#) - from Unpaywall

**Abstract:**BACKGROUND Topical corticosteroids (TCS) can induce adverse effects, such as skin atrophy. Although TCS can cause increases in intraocular pressure (IOP), the effects of daily TCS use on IOP have not been fully elucidated. We evaluated the clinical doses of TCS and the change in the IOP during the daily treatment of atopic dermatitis (AD). METHODS We collected clinical data on a total of 65 patients who were diagnosed with AD and underwent 2 or more IOP measurements at our hospital. RESULTS Mean monthly facial steroid volumes of  $\leq 11.8$  g and  $\leq 15.0$  g of TCS were applied to 90% of the patients aged 2-12 years and those aged  $\geq 13$  years, respectively. During the treatment, there were no TCS-related increases in IOP in any patient. CONCLUSION Our study suggests that TCS might not cause increases in IOP at the abovementioned doses. However, the IOP of steroid responders is known to be highly responsive to steroids. Therefore, patients who have steroids applied to their eyelids had better undergo regular IOP measurements at ophthalmological clinics.

**Database:** Medline

#### 44. Wet-wrap therapy with halometasone cream for severe adult atopic dermatitis.

**Author(s):** Xu, Wei; Li, Yan; Chen, Zeyu; Liu, Teng; Wang, Shan; Li, Linfeng

**Source:** Postgraduate medicine; Jun 2018; vol. 130 (no. 5); p. 470-476

**Publication Date:** Jun 2018

**Publication Type(s):** Clinical Trial Journal Article

**PubMedID:** 29768078

**Abstract:**BACKGROUND Currently there is no cure for severe atopic dermatitis (AD). Wet-wrap therapy (WWT) has also been used to treat pediatric AD and shown a satisfactory effectiveness, but clinical evidence supporting the use of WWT on severe adult AD is still insufficient. METHODSTwelve patients (eight men and four women) with severe AD (SCORing Atopic Dermatitis [SCORAD] score  $\geq$  50) treated between January 2015 and September 2017 in our hospital were included. The patients underwent WWT (daily dose: 15 g halometasone cream+100g Vaseline ointment) twice daily for 2 h/session for 7 days. SCORAD, visual analog scale (VAS) for pruritus, investigator's global assessment (IGA), dermatology life quality index (DLQI) scores and serum cortisol levels were determined before and after the WWT. RESULTSThe patients (mean age:  $58.9 \pm 18.9$  years; range: 27-85 years) had a median disease duration of 27.5 months. After the WWT, the average scores of SCORAD ( $28.79 \pm 5.16$  vs.  $68.59 \pm 8.61$ , 95%CI: 35.18-44.42), VAS ( $2.75 \pm 0.62$  vs.  $7.5 \pm 1.17$ , 95%CI: 4.14-5.36), IGA ( $1.83 \pm 0.39$  vs.  $4.08 \pm 0.51$ , 95%CI: 1.96-2.54), and DQLI score ( $8.33 \pm 1.83$  vs.  $13.83 \pm 2.79$ , 95%CI: 4.16-6.84) reduced significantly compared with the scores before the WWT (All  $P < 0.001$ ). However, serum cortisol levels were not affected significantly by the WWT. Four patients complained of tolerable wet dressing-associated discomforts, which was resolved after the wet dressing was removed when the WWT was completed. For the 85-year-old man, serum cortisol levels were lower than the normal value after the WWT ( $3.67 \mu\text{g/dL}$ ) but restored to the normal levels ( $13.44 \mu\text{g/dL}$ ) 2 weeks after the WWT was ended. No other adverse events occurred. CONCLUSIONWWT can relieve pruritus, reduce skin lesions, and improve quality of life in adult patients with severe AD. Thus, WWT may be effective and safe for severe adult AD. Trial registration No. is ChiCTR1800014909 ( <http://www.chictr.org.cn/index.aspx> ).

**Database:** Medline

#### 45. Contact dermatitis and patch testing for the allergist.

**Author(s):** Fonacier, Luz; Noor, Irum

**Source:** Annals of allergy, asthma & immunology : official publication of the American College of Allergy, Asthma, & Immunology; Jun 2018; vol. 120 (no. 6); p. 592-598

**Publication Date:** Jun 2018

**Publication Type(s):** Journal Article Review

**PubMedID:** 29522811

**Abstract:**OBJECTIVETo review of contact dermatitis (CD) and its key allergens and provide updates and recommendations for the practicing allergist. DATA SOURCESThrough the use of various scientific search engines (eg, PubMed and MEDLINE), we reviewed literature on CD, patch tests (PTs), key allergens, occupational dermatitis, and treatment. STUDY SELECTIONSStudies on CD, important allergens, and PTs were considered. RESULTSThe contact-induced dermatitis may be due to allergic CD, irritant CD, systemic CD, contact urticaria, and protein CD. Key allergens include metals (nickel, gold), topical medicaments (topical corticosteroids), and cosmetics and personal care products (fragrances and preservatives such as methyl- and methylchloro-isothiazolinone). Present relevance of a positive PT result is the combination of definite, probable, and possible relevance and should be correlated with the patient's history and physical examination. Treatment of allergic CD includes identification of relevant allergens, patient education, avoidance, and provision of

alternative products the patient can use. CONCLUSION CD is a common inflammatory skin disease and should be suspected in patients presenting with acute, subacute, or chronic dermatitis. The gold standard for diagnosing allergic CD is a PT. This article provides practical recommendations for the diagnosis and management of CD commonly seen by the allergist in their practice.

**Database:** Medline

#### **46. Management of childhood eczema: reflections from secondary care**

**Author(s):** Tso, Simon

**Source:** The British Journal of General Practice : The Journal of the Royal College of General Practitioners; Jun 2018; vol. 68 (no. 671); p. 269

**Publication Date:** Jun 2018

**Publication Type(s):** Journal Article

Available at [British Journal of General Practice](#) - from EBSCO (MEDLINE Complete)

Available at [British Journal of General Practice](#) - from Unpaywall

**Abstract:** From Tso's experience in secondary care, managing parental expectations and helping families integrate treatment plans into their daily routine are some of the key challenges in managing childhood eczema. Clinicians have to rely on their professional judgement when counselling families on the safe use of topical corticosteroids as guidelines do not provide clear recommendations. Many primary care physicians in the UK may find themselves not in a position to initiate topical calcineurin inhibitor as a steroid sparing therapy due to NICE guidance. It is important to explore the family's treatment preference and their daily skin care routine for the affected child.

**Database:** BNI

#### **47. An independent relation of atopic dermatitis to exercise-induced wheezing in asthmatic children.**

**Author(s):** Honjo, Satoshi; Murakami, Yoko; Odajima, Hiroshi; Adachi, Yuichi; Yoshida, Koichi; Ohya, Yukihiro; Akasawa, Akira

**Source:** Allergology international : official journal of the Japanese Society of Allergology; May 2018

**Publication Date:** May 2018

**Publication Type(s):** Journal Article

**PubMedID:** 29857932

Available at [Allergology International](#) - from Unpaywall

**Abstract:** BACKGROUND Atopic dermatitis (AD) and exercise-induced asthma (EIA) are common in asthmatic children, and exercise is the most common trigger other than infection for acute onset asthma attack in children. We examined whether AD is related to exercise-induced wheezing (EIW), some proxy for EIA. METHODS Japanese version of the International Study of Asthma and Allergies in Childhood questionnaires were used. For 12,405 asthmatic school children, AD was defined as itchy rash coming and going for at least 6 months at any time in the last 12 months with affecting places of flexural parts of body, and severity of AD was rated according to frequency of being kept awake at night with the itch as follows: never in the past 12 months, less than one night per week and one or more nights per week. RESULTS Adjusted for frequency of asthma attack, odds ratios (OR) of children with current AD as compared to those without AD for having EIW were 1.32 (95% confidence

interval = 1.15-1.52), 1.35 (1.14-1.68) and 1.10 (0.92-1.31) for primary school, junior high school and high school children, respectively. EIW was more likely observed in accordance with increasing severity of AD in the primary school children with ORs of 1.12, 1.59 and 1.54 ( $p$  for trend < 0.01), and in the junior high school ones with ORs of 1.18, 1.31, 2.03 (<0.01), respectively. CONCLUSIONSAD may be possibly related to EIW. Further studies investigating effect of AD treatment on EIW may be required.

**Database:** Medline

## Psoriasis

### **48. Effects of tumor necrosis factor- $\alpha$ , interleukin-23 and interleukin-17A inhibitors on bodyweight and body mass index in patients with psoriasis.**

**Author(s):** Takamura, Saori; Takahashi, Aya; Inoue, Yumiko; Teraki, Yuichi

**Source:** The Journal of dermatology; Sep 2018; vol. 45 (no. 9); p. 1130-1134

**Publication Date:** Sep 2018

**Publication Type(s):** Journal Article

**PubMedID:** 30004583

Available at [The Journal of dermatology](#) - from Wiley

**Abstract:** Treatment with tumor necrosis factor- $\alpha$  inhibitors has been reported to cause weight gain in patients with psoriasis; however, limited information is available in terms of the effects of interleukin (IL)-23 and IL-17A inhibitors on bodyweight (BW) in patients with psoriasis. This study aimed to investigate the effects of infliximab, ustekinumab and secukinumab on BW and body mass index (BMI) in patients with psoriasis. We retrospectively examined changes in BW and BMI among patients treated with these biologics at our hospital. At baseline, no significant differences in BW and BMI were observed among the patients treated with infliximab ( $n = 18$ ), ustekinumab ( $n = 30$ ) or secukinumab ( $n = 20$ ). After 7 months of the therapy, significant increases in mean BW (from 71.4 to 74.3 kg) and mean BMI (from 24.7 to 25.7) were observed in the patients treated with infliximab, whereas no significant changes were observed in those treated with ustekinumab (BW, from 70.3 to 70.1 kg; BMI, from 25.4 to 25.3) or secukinumab (BW, from 69.0 to 68.9 kg; BMI, from 25.2 to 25.2). There were no differences in the proportion of the patients who showed 75% or more improvement in the Psoriasis Area and Severity Index among the three groups. These results suggest that infliximab increases BW in the patients with psoriasis, whereas ustekinumab and secukinumab do not affect the BW in these patients.

**Database:** Medline

### **49. Infectious risk of biological drugs vs. traditional systemic treatments in moderate-to-severe psoriasis: a cohort analysis in the French insurance database.**

**Author(s):** Couderc, Sylvain; Lapeyre-Mestre, Maryse; Bourrel, Robert; Paul, Carle; Montastruc, Jean-Louis; Sommet, Agnès

**Source:** Fundamental & clinical pharmacology; Aug 2018; vol. 32 (no. 4); p. 436-449

**Publication Date:** Aug 2018

**Publication Type(s):** Journal Article Observational Study

**PubMedID:** 29446857

Available at [Fundamental & Clinical Pharmacology](#) - from Wiley

**Abstract:**The aim of this study was to compare the infectious risk between a group of psoriasis patients treated by biological drugs (BD) and a group treated by traditional systemic treatments (TST). We built a retrospective observational cohort study from the French health insurance database in the Midi-Pyrénées area (2.9 million inhabitants, southwest of France) using data from 01/01/2010 to 12/31/2013. We compared the infectious risk between 'exposed' patients treated with BD (adalimumab, etanercept, infliximab, or ustekinumab) and 'unexposed' patients treated by TST (phototherapy, acitretin, methotrexate, or cyclosporine). We realized a survival analysis on the first infectious event, defined as an anti-infective drug delivery or a hospital diagnosis of infection. We selected 101 'exposed' and 788 'unexposed' patients. In our multivariate Cox model, 'exposure' did not seem to decrease the time frame of the first infectious event compared with 'nonexposure' (HR = 0.94, P = 0.62). Among all treatment, the safest seemed to be ustekinumab while the least safe was etanercept. We found factors statistically associated with the risk of infection: gender (female vs. male), economic deprivation, chronic hepatitis B or C, history of cancer, at least one infectious event, and the number of different drugs during the 6-month period before the study. We did not find any difference of infective risk between the BD and the TST. This result enhances the recent PSONET registries conclusions.

**Database:** Medline

## 50. Demyelination during anti-tumour necrosis factor therapy for psoriasis.

**Author(s):** Boggs, J M E; Barnes, L

**Source:** Clinical and experimental dermatology; Jul 2018; vol. 43 (no. 5); p. 577-578

**Publication Date:** Jul 2018

**Publication Type(s):** Case Reports Journal Article

**PubMedID:** 29464730

Available at [Clinical and Experimental Dermatology](#) - from Wiley

**Abstract:**Anti-tumour necrosis factor (anti-TNF) therapies have been associated with neurological complications, including in rare cases demyelinating disease. It is currently unknown whether patients who have received more than one immunosuppressive agent or anti-TNF have a greater risk of demyelination. We report the case of a 37-year-old woman with psoriasis who presented with an acute episode of demyelination while on anti-TNF therapy. This case was complicated by the fact that progressive multifocal leukoencephalopathy was considered the likely diagnosis initially and was only definitively excluded by brain biopsy. This case demonstrates the difficulty establishing the correct diagnosis in patients with atypical presentations on immunomodulating therapies. We present this rare case of demyelination in a patient who received multiple immunosuppressive therapies to highlight this challenging clinical situation and discuss management with a literature review.

**Database:** Medline

## Paediatric

### 51. Prospective Study of Pulse Therapy in Childhood Pemphigus Disorders.

**Author(s):** Katakam, Bhumesh Kumar; Kavitha, S B; Netha, G Narsimha Rao; Shahana, M; Sri, T Satya; Vani, D Sudha

**Source:** Indian dermatology online journal; 2018; vol. 9 (no. 6); p. 422-425

**Publication Date:** 2018

**Publication Type(s):** Journal Article

**PubMedID:** 30505783

Available at [Indian dermatology online journal](#) - from Europe PubMed Central - Open Access

**Abstract:**Background Pemphigus disorders are a group of immunobullous diseases affecting skin and/or mucous membranes. Dexamethasone cyclophosphamide pulse (DCP)/dexamethasone only pulse (DOP) therapy has shown promising results in the management of pemphigus group of diseases in adults. Aim To evaluate the outcome of pulse therapy (PT) in pediatric cases diagnosed with pemphigus vulgaris (PV). Materials and Methods Prospective study of 12 pediatric cases of PV from 2010 to 2015 and treated with PT in Gandhi Hospital. The patients were treated with DOP therapy, with a dose of 50 mg of dexamethasone in 250 ml of 5% dextrose in pediatric patients below the age of 12 years and 100 mg of dexamethasone in 500 ml of 5% dextrose for above 12 years, for three consecutive days. No interpulse steroids or rituximab were given to any patients in our study. Results Out of 12 cases, 10 were female and 2 were male children. Four cases were below the age of 12 years and 8 cases were above the age of 12 years. The lowest age was 11 years female and highest age was 16 years male child. Average duration of illness is between 4 and 6 months. Six cases completed three phases, four cases were in phase II cycle 7, and two cases were in phase IV. In majority of cases clinical improvement was observed between 2 and 4 pulses in phase I. No significant adverse effects were observed in any case except in two cases who developed headache, shivering, and nausea in first one to two pulses of phase I and managed conservatively. Conclusion Our study shows that PT gives good response in the management of pemphigus in children, in terms of remission and side effects. There was no significant major adverse effect as observed in adults. In low-resource centers such as government institution, PT would be one option. Further studies and long-term follow-up are required to weigh the risks and benefits of PT in pediatric age group.

**Database:** Medline

### 52. Capillary leak syndrome and aseptic meningitis in a patient with Kawasaki disease: A case report.

**Author(s):** Zhang, Yufeng; Wan, Han; Du, Maosheng; Deng, Huiling; Fu, Jia; Zhang, Yu; Wang, Xiaoyan; Liu, Ruiqing

**Source:** Medicine; Jun 2018; vol. 97 (no. 23); p. e10716

**Publication Date:** Jun 2018

**Publication Type(s):** Case Reports Journal Article

**PubMedID:** 29879013

Available at [Medicine](#) - from Europe PubMed Central - Open Access

Available at [Medicine](#) - from IngentaConnect - Open Access

**Abstract:** RATIONALE Kawasaki disease (KD) is an acute vasculitis of childhood, coronary complications are the most serious and classic complications of this disease. However, simultaneous complications such as systemic capillary leak syndrome (CLS) and aseptic meningitis are rarely reported. PATIENT CONCERN SA 19-month-old boy had continuous fever for 6 days, rash for 3 days, and somnolence for 1 day. DIAGNOSE The boy was diagnosed with KD presenting with SCLS and aseptic meningitis. INTERVENTIONS He was treated with gamma globulin (2 g/kg) for 1 day, mannitol and furosemide to reduce intracranial pressure, human albumin to correct hypoproteinemia, methylprednisolone to control inflammation, and both aspirin and dipyridamole for anticoagulation. OUTCOMES After treatment, the patient recovered well. At one year follow-up, the patient was asymptomatic and showed no recurrence of skin rash. LESSON The incidence of KD has recently increased and cardiovascular complications are frequently reported. This may be combined with systemic damage, however, the combination of SCLS and aseptic meningitis is rarely reported, therefore, children who have SCLS, aseptic meningitis and unexplained fever >5 days, KD should be taken into account. Early diagnosis and timely treatment can reduce complications induced by KD.

**Database:** Medline

## NICE Guidance

Round up of Guidance and advice. For the full range of NICE Guidance – Skin Conditions, please see <https://www.nice.org.uk/guidance/conditions-and-diseases/skin-conditions>

### [Abatacept for treating active psoriatic arthritis after DMARDs \[ID993\]](#)

Expected publication date: TBC

### [Certolizumab pegol for treating moderate to severe plaque psoriasis \[ID1232\]](#)

Expected publication date: 17.4.2019

To appraise the clinical and cost effectiveness of certolizumab pegol within its marketing authorisation for treating moderate to severe plaque psoriasis.

### [Ixekizumab for treating active psoriatic arthritis after inadequate response to DMARDs](#)

Technology appraisal guidance [TA537]

Published date: 08 August 2018

### [Tildrakizumab for treating moderate to severe plaque psoriasis \[ID1060\]](#)

In development [GID-TA10191]

Expected publication date: 17 April 2019

### [Tofacitinib for treating active psoriatic arthritis after inadequate response to DMARDs](#)

Technology appraisal guidance [TA 542]

Published date: 03 October 2018

### [Encorafenib with binimetinib for treating advanced \(unresectable or metastatic\) BRAF V600](#)

mutation-positive melanoma [ID923]

In development [GID-TA10217]

### [Nivolumab for adjuvant treatment of resected stage III and IV melanoma \[ID1316\]](#)

In development [GID-TA10286]  
Expected publication date: 16 January 2019

**[Pembrolizumab for adjuvant treatment of melanoma with high risk of recurrence \[ID1266\]](#)**

In development [GID-TA10247]  
Expected publication date: 20 December 2018

**[Dupilumab for treating moderate to severe atopic dermatitis \(TA534\)](#)**

Published date: August 2018

**[Mastocytosis \(systemic\) – masitinib \[ID781\]](#)**

In development [GID-TA10019]  
Expected publication date: TBC

**[Secondary infection of common skin conditions including eczema: antimicrobial prescribing](#)**

NICE guideline  
Expected publication date: 12<sup>th</sup> December 2019

**[Endoscopic ablation for an pilinodal sinus](#)**

In development [GID-IPG10095]  
Expected publication date: 17<sup>th</sup> April 2019

**[Mepilex Border Heel and Sacrum dressings for preventing pressure ulcers](#)**

In development [GID-MT519]  
Expected publication date: 10<sup>th</sup> January 2019

**[UrgoStart for treating leg ulcers and diabetic foot ulcers](#)**

In development [GID-MT520]  
Expected publication date 31<sup>st</sup> January 2019

Others are in development for later in 2019, with the exception of the new guideline I have included ones due to be published before May 2019

***Please note** that information provided in this update is collated from a variety of sources but coverage of the topic is not comprehensive. Every effort has been made to ensure that the information provided is accurate, up-to-date and complete. However, articles may contain errors and the inclusion of a web link does not imply approval of the contents of the website. No responsibility can be accepted for any action taken on the basis of this information.*

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