Healthcare Library
Current Awareness Bulletin – Dermatology
December 2014 & January 2015

This monthly Current Awareness Bulletin is produced by the Healthcare Library to provide Salisbury NHS Foundation Trust staff working in Dermatology with a range of resources to support practice. It includes recently published guidelines and research articles, news and policy items, and details of forthcoming events and conferences.

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UpToDate

What's new in dermatology

Guidelines

National Institute for Health and Care Excellence (NICE)

Dabrafenib for treating unresectable or metastatic BRAF V600 mutation-positive melanoma

Journal Articles

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**Journal articles:**

1. A review of nicotinamide: Treatment of skin diseases and potential side effects

**Citation:** Journal of Cosmetic Dermatology, December 2014, vol./is. 13/4(324-328), 1473-2130;1473-2165 (01 Dec 2014)

**Author(s):** Rolfe H.M.

**Language:** English

**Abstract:** Nicotinamide, also known as niacinamide, is the amide form of vitamin B3. It is a precursor of essential coenzymes for numerous reactions in the body including adenosine triphosphate (ATP) production. Nicotinic acid, also known as niacin, is converted into nicotinamide in the body. The use of topical nicotinamide in the treatment of acne vulgaris; melasma; atopic dermatitis; rosacea; and oral nicotinamide in preventing nonmelanoma skin cancer is discussed. The possible side effects and consequences of excessive nicotinamide exposure are reviewed, including suggestions nicotinamide might have a role in the development of diabetes, Parkinson's disease, and liver damage.

**Publication type:** Journal: Review

**Source:** EMBASE

**Full text:** Available [Journal of cosmetic dermatology](https://link) at No link? Ask Salisbury Healthcare Library - please click here to request article.

2. Abstracts for the 3rd Eastern Asia Dermatology Congress

**Citation:** Journal of Dermatology, October 2014, vol./is. 41/, 0385-2407 (October 2014)

**Language:** English

**Abstract:** The proceedings contain 679 papers. The topics discussed include: chemokine expression in diverse nonimmediate drug hypersensitivity reactions: focus on thymus activation-regulated chemokine, cutaneous T-cell-attracting chemokine, and interleukin-10; study on the role of RASGRP1 in the pathogenesis of eczema and immune mechanisms; sweat and sweat allergy as aggravating factors in atopic dermatitis; in vitro antibacterial activity of fusidic acid cream against dominant bacteria isolated from acne vulgaris lesions; isolation and identification of microorganisms from the skin lesions of patients with acne and susceptibility testing of the microorganisms; a study of vitamin D and cathelicidin expression in Korean Rosacea patients; imbalance of circulating TH17 and TREG cells in patients with alopecia areata; eosinophilic pustular folliculitis: the first case infiltrating kidney transplantation recipient; and a case of nerve sheath myxoma on finger.

**Publication type:** Journal: Conference Review

**Source:** EMBASE

**Full text:** Available [The Journal of dermatology](https://link) at No link? Ask Salisbury Healthcare Library - please click here to request article.

3. Bisphosphonate-induced cutaneous adverse events: The difficulty of assessing imputability through patch testing

**Citation:** Dermatology, December 2014, vol./is. 229/3(163-168), 1018-8665;1421-9832 (02 Dec 2014)

**Author(s):** Barrantes-Gonzalez M., Espona-Quer M., Salas E., Gimenez-Arnau A.M.

**Language:** English

**Abstract:** Background: Cutaneous adverse drug reactions (CADRs) due to bisphosphonates (BPs) have been scarcely described in the literature. Objective: To discuss the diagnostic value and limitations of cutaneous provocation tests with BPs. Methods: A descriptive case series study with a control group of CADRs due to BPs studied using patch testing from 2005 to 2010 is presented. Results: Patient 1 showed a positive D4++ with alendronate at 1% in petrolatum and D4+++ with alendronate at 1 and 0.1% in water. Patient 2 showed a positive intradermal test D3++ with alendronate at 0.1% in water. Patient 3 showed a positive patch test D4+ with ibandronate at 1% in petrolatum and D4++ with ibandronate at 1% in water, and a positive intradermal test D3+++ with ibandronate at 0.1% in water. Conclusion: Establishing a correct interpretation of a patch test reaction is difficult based just on cutaneous test results. Too high
concentrations of the drug can cause irritation and too low concentrations can be responsible of false-negative test reactions.

Publication type: Journal: Review
Source: EMBASE
Full text: Available Dermatology (Basel, Switzerland) at No link? Ask Salisbury Healthcare Library - please click here to request article.

4. Complications of Decorative Tattoos: Recognition and Management
Citation: American Journal of Clinical Dermatology, November 2014, vol./is. 15/6(525-536), 1175-0561;1179-1888 (21 Nov 2014)
Author(s): Simunovic C., Shinohara M.M.
Language: English
Abstract: Tattooing is an ancient practice that enjoys continued popularity. Although a modern, professionally performed tattoo is generally safe, complications can occur. A skin biopsy of all tattoo reactions is recommended as some tattoo reactions have systemic implications. Tattoo-related infections are seen days to decades after tattooing, and range from acute pyogenic infections to cutaneous tuberculosis. In particular, non-tuberculous mycobacterial infections happen in tattoos with increasing frequency and are introduced at the time of tattooing through contaminated ink or water used to dilute inks. Despite a transition in tattoo pigments from metal salts to industrial azo dyes, hypersensitivity reactions also persist, and include eczematous, granulomatous, lichenoid, and pseudoepitheliomatous patterns (among others). Granulomatous tattoo reactions can be a clue to cutaneous or systemic sarcoidosis, particularly in the setting of interferon use. Pseudoepitheliomatous tattoo reactions have substantial overlap with squamous cell carcinoma and keratoacanthoma, making diagnosis and management difficult. Other malignancies and their benign mimics can occur in tattoos, raising questions about the safety of tattoo ink and its role in carcinogenesis.
Publication type: Journal: Review
Source: EMBASE
Full text: Available American journal of clinical dermatology at No link? Ask Salisbury Healthcare Library - please click here to request article.

5. Cutaneous stigmata associated with insulin resistance and increased cardiovascular risk
Citation: International Journal of Dermatology, September 2014, vol./is. 53/9(1062-1069), 0011-9059;1365-4632 (September 2014)
Author(s): Schilling W.H.K., Crook M.A.
Language: English
Abstract: Certain cutaneous conditions have been reported to be associated with diabetes mellitus, insulin resistance, and metabolic syndrome. In this novel review paper, the evidence linking various cutaneous phenomena (e.g. skin tags, acanthosis nigricans, ear lobe creases, and xanthelasma) and metabolic syndrome and cardiovascular disease is examined, and explanations for these associations are proposed. 2014 The International Society of Dermatology.
Publication type: Journal: Review
Source: EMBASE
Full text: Available International journal of dermatology at No link? Ask Salisbury Healthcare Library - please click here to request article.

6. Diaper dermatitis: Clinical characteristics and differential diagnosis
Citation: Pediatric Dermatology, November 2014, vol./is. 31/s1(19-24), 0736-8046;1525-1470 (01 Nov 2014)
Author(s): Coughlin C.C., Eichenfield L.F., Frieden I.J.
Language: English
Abstract: A diverse group of diseases can cause skin conditions in the diaper area including those which are directly caused by diapers or the diaper environment, some which are not directly due to, but are worsened by, the wearing of diapers, and those which are independent of the presence of the diaper or its resulting environment. Many of these conditions are limited to this area of the skin, but others extend to skin outside this area, and some are signs of systemic disease. We review many of the important causes of
eruptions in the diaper area and emphasize key points in the differential diagnosis.

Publication type: Journal: Review
Source: EMBASE
Full text: Available Pediatric dermatology at No link? Ask Salisbury Healthcare Library - please click here to request article.

7. Emerging topical onychomycosis therapies-quo vadis?
Citation: Expert Opinion on Emerging Drugs, December 2014, vol./is. 19/4(489-495), 1472-8214;1744-7623 (01 Dec 2014)
Author(s): Elkeeb R., Hui X., Murthy N., Maibach H.I.
Language: English
Abstract: Introduction: Onychomycosis, a common chronic fungal infection affecting fingernails and toenails, globally may affect 10-30% of the population. This chronic disease is difficult to eradicate. The goal of developing a highly effective and safe topical treatment has not yet been reached as it depends on the type of onychomycosis and the variety of invaders. Areas covered: Topical drug delivery to the nail is highly desirable in treating nail disorders. However, efficacy of topical therapies is low due to their limited permeability across the nail plate. Advances have especially been made by the development of new therapeutic options including new drug entities, new formulations and reformulations. This overview updates emerging topical treatments for onychomycosis, research progress and future perspectives. Expert opinion: Development of novel effective noninvasive topical therapy for treating onychomycosis and other nail diseases such as psoriasis is long overdue. Previously there was a lack of basic knowledge about nail and its barrier properties, but with the recent increased interest in this field both from industry and academia, we hope extensive research will continue in this field to bring about successful and safe treatments for such chronic diseases. 2014 Informa UK, Ltd.
Publication type: Journal: Review
Source: EMBASE
Full text: Available Expert opinion on emerging drugs at No link? Ask Salisbury Healthcare Library - please click here to request article.

8. Fungal infections of the skin and nail: New treatment options
Citation: Expert Review of Anti-Infective Therapy, November 2014, vol./is. 12/11(1389-1405), 1478-7210;1744-8336 (01 Nov 2014)
Author(s): Eldridge M.L., Chambers C.J., Sharon V.R., Thompson G.R.
Language: English
Abstract: Knowledge of the currently available antifungal agents, along with clinical, microbiologic and histopathologic methods, can help the medical professional optimally manage skin and nail fungal infections. With regards to treatment of fungal disease of the skin or nail, there are a variety of systemic antifungal agents, including several newer agents that have different formulations, tolerability, adverse effect profiles and spectrum of activity. This review will highlight the clinically important fungal infections of the skin and nail and describe the activity and role of antifungal treatment.
Publication type: Journal: Review
Source: EMBASE
Full text: Available Expert review of anti-infective therapy at No link? Ask Salisbury Healthcare Library - please click here to request article.

9. Hand dermatitis: an allergist's nightmare
Citation: Current allergy and asthma reports, November 2014, vol./is. 14/11(474), 1534-6315 (Nov 2014)
Author(s): Wold L., Chen J.K., Lampel H.P.
Language: English
Abstract: Hand dermatitis is a common skin complaint. We use our hands to explore our environment; subsequently, our hands are in frequent contact with potential allergens and irritants. Patients with hand dermatitis may present to their allergist with this complaint. Approaching the diagnosis and treatment of hand dermatitis can be challenging, as both internal and external factors may contribute to the overall condition. Furthermore, the differential diagnosis of hand dermatitis is broad and the cause often multifactorial. Obtaining a thorough history and performing a focused examination may help the clinician
Differentiate between multiple causes of hand dermatitis. Numerous treatment options exist for hand dermatitis, and new potential treatments are in development as well. We aim to provide the allergist with a streamlined toolkit for help in the diagnosis and management of hand dermatitis.

**Publication type:** Journal: Review  
**Source:** EMBASE  
**Full text:** Available *Current allergy and asthma reports* at No link? Ask Salisbury Healthcare Library - please click here to request article.

### 10. IgG4-related skin disease

**Citation:** British Journal of Dermatology, November 2014, vol./is. 171/5(959-967), 0007-0963;1365-2133 (01 Nov 2014)  
**Author(s):** Tokura Y., Yagi H., Yanaguchi H., Majima Y., Kasuya A., Ito T., Maekawa M., Hashizume H.  
**Language:** English  
**Abstract:** Summary IgG4-related disease (IgG4-RD) is a recently established clinical entity characterized by high levels of circulating IgG4, and tissue infiltration of IgG4<sup>+</sup> plasma cells. IgG4-RD exhibits a distinctive fibroinflammatory change involving multiple organs, such as the pancreas and salivary and lacrimal glands. The skin lesions of IgG4-RD have been poorly characterized and may stem not only from direct infiltration of plasma cells but also from IgG4-mediated inflammation. Based on the documented cases together with ours, we categorized the skin lesions into seven subtypes: (1) cutaneous plasmacytosis (multiple papulonodules or indurations on the trunk and proximal part of the limbs), (2) pseudolymphoma and angiolymphoid hyperplasia with eosinophilia (plaques and papulonodules mainly on the periauricular, cheek and mandible regions), (3) Mikulicz disease (palpebral swelling, sicca syndrome and exophthalmos), (4) psoriasis-like eruption (strikingly mimicking psoriasis vulgaris), (5) unspecified maculopapular or erythematous eruptions, (6) hypergammaglobulinaemic purpura (bilateral asymmetrical palpable purpuric lesions on the lower extremities) and urticarial vasculitis (prolonged urticarial lesions occasionally with purpura) and (7) ischaemic digit (Raynaud phenomenon and digital gangrene). It is considered that subtypes 1-3 are induced by direct infiltration of IgG4<sup>+</sup> plasma cells, while the other types (4-7) are caused by secondary mechanisms. IgG4-related skin disease is defined as IgG4<sup>+</sup>-cell-infiltrating skin lesions that form plaques, nodules or tumours (types 1-3), but may manifest secondary lesions caused by IgG4<sup>+</sup> plasma cells and/or IgG4 (types 4-7). What is already known about this topic? IgG4-related skin disease (IgG4-RD) is a recently established clinical entity characterized by fibroinflammatory lesions, high levels of circulating IgG4 and tissue infiltration of IgG4<sup>+</sup> plasma cells. What does this study add? We comprehensively categorized the skin lesions of IgG4-RD into primary lesions with direct infiltration of IgG4<sup>+</sup> plasma cells (three subtypes) and secondary nonspecific inflammatory lesions where the role of IgG4 remains to be elucidated (four subtypes). Our study clarifies IgG4-related skin disease and its differential diagnoses.

**Publication type:** Journal: Review  
**Source:** EMBASE  
**Full text:** Available *BRITISH JOURNAL OF DERMATOLOGY* at No link? Ask Salisbury Healthcare Library - please click here to request article.  
**Full text:** Available *BRITISH JOURNAL OF DERMATOLOGY* at Salisbury District Hospital

### 11. Insights into drug delivery across the nail plate barrier

**Citation:** Journal of Drug Targeting, November 2014, vol./is. 22/9(769-789), 1061-186X;1029-2330 (01 Nov 2014)  
**Author(s):** Saner M.V., Kulkarni A.D., Pardeshi C.V.  
**Language:** English  
**Abstract:** Topical therapy is at the forefront in treating nail ailments (especially onychomycosis and nail psoriasis) due to its local effects, which circumvents systemic adverse events, improves patient compliance and reduces treatment cost. However, the success of topical therapy has been hindered due to poor penetration of topical therapeutics across densely keratinized nail plate barrier. For effective topical therapy across nail plate, ungual drug permeation must be enhanced. Present review is designed to provide an insight into prime aspects of transungual drug delivery viz. nail structure and physiology, various onychopathies, techniques of nail permeation enhancement and in vitro models for trans-nail drug permeation studies. Updated list of drug molecules studied across the nail plate and key commercial
products have been furnished with sufficient depth. Patents pertinent to, and current clinical status of transungual drug delivery have also been comprehensively reviewed. This is the first systematic critique encompassing the detailed aspects of transungual drug delivery. In our opinion, transungual drug delivery is a promising avenue for researchers to develop novel formulations, augmenting pharmaceutical industries to commercialize the products for nail disorders.

**Publication type:** Journal: Review  
**Source:** EMBASE  
**Full text:** Available *Journal of drug targeting* at No link? Ask Salisbury Healthcare Library - please click here to request article.

### 12. Luliconazole for the treatment of fungal infections: An evidence-based review

**Citation:** Core Evidence, September 2014, vol./is. 9/(113-124), 1555-1741;1555-175X (24 Sep 2014)  
**Author(s):** Khanna D., Bharti S.  
**Language:** English  
**Abstract:** Luliconazole is an imidazole antifungal agent with a unique structure, as the imidazole moiety is incorporated into the ketene dithioacetate structure. Luliconazole is the R-enantiomer, and has more potent antifungal activity than lanoconazole, which is a racemic mixture. In this review, we summarize the in vitro data, animal studies, and clinical trial data relating to the use of topical luliconazole. Preclinical studies have demonstrated excellent activity against dermatophytes. Further, in vitro/in vivo studies have also shown favorable activity against Candida albicans, Malassezia spp., and Aspergillus fumigatus. Luliconazole, although belonging to the azole group, has strong fungicidal activity against Trichophyton spp., similar to that of terbinafine. The strong clinical antifungal activity of luliconazole is possibly attributable to a combination of strong in vitro antifungal activity and favorable pharmacokinetic properties in the skin. Clinical trials have demonstrated its superiority over placebo in dermatophytosis, and its antifungal activity to be at par or even better than that of terbinafine. Application of luliconazole 1% cream once daily is effective even in short-term use (one week for tinea corporis/cruris and 2 weeks for tinea pedis). A Phase I/IIa study has shown excellent local tolerability and a lack of systemic side effects with use of topical luliconazole solution for onychomycosis. Further studies to evaluate its efficacy in onychomycosis are underway. Luliconazole 1% cream was approved in Japan in 2005 for the treatment of tinea infections. It has recently been approved by US Food and Drug Administration for the treatment of interdigital tinea pedis, tinea cruris, and tinea corporis. Topical luliconazole has a favorable safety profile, with only mild application site reactions reported occasionally.

**Publication type:** Journal: Review  
**Source:** EMBASE  
**Full text:** Available *Core Evidence* at Core Evidence  
**Full text:** Available *Core Evidence* at No link? Ask Salisbury Healthcare Library - please click here to request article.

### 13. Metastatic Crohn's disease: a review and approach to therapy

**Citation:** Journal of the American Academy of Dermatology, October 2014, vol./is. 71/4(804-813), 1097-6787 (Oct 2014)  
**Author(s):** Kurtzman D.J., Jones T., Lian F., Peng L.S.  
**Language:** English  
**Abstract:** Metastatic Crohn’s disease (CD) is a rare cutaneous manifestation of CD that was first described nearly 50 years ago. Many subsequent reports have defined its most common clinical and histopathologic features. The pathogenesis underlying metastatic CD is unknown but various hypotheses exist. An established standard therapy is lacking. Owing to its rarity and nonspecific clinical presentation along with the diversity of inflammatory skin disorders that often complicate CD, the diagnosis of metastatic CD may be overlooked. This report highlights the salient features of this disorder to facilitate recognition and management of this rare dermatosis. Copyright 2014 American Academy of Dermatology, Inc. Published by Elsevier Inc. All rights reserved.

**Publication type:** Journal: Review  
**Source:** EMBASE  
**Full text:** Available *Journal of the American Academy of Dermatology* at No link? Ask Salisbury Healthcare
14. Midchildhood acne associated with inhaled corticosteroids: Report of two cases and review of the literature
Citation: Pediatric Dermatology, November 2014, vol./is. 31/6(712-715), 0736-8046;1525-1470 (01 Nov 2014)
Author(s): Liu K.J., Antaya R.J.
Language: English
Abstract: Midchildhood acne has been attributed to a number of causes in the literature, including adrenocortical tumor, hyperandrogenemia due to hypothalamic dysfunction, and contact with greasy topical skin care products. There are only a few case reports of inhaled steroids causing acneiform eruptions, all of which occurred in adults and with symptoms suggesting that the acne resulted from systemic absorption. We present two cases of comedonal and inflammatory midchildhood acne temporally associated with the use of inhaled corticosteroids administered through face masks, implicating a causative relationship between topical steroid exposure and midchildhood acne that does not necessitate systemic absorption.
Publication type: Journal: Review
Source: EMBASE
Full text: Available Pediatric dermatology at No link? Ask Salisbury Healthcare Library - please click here to request article.

15. Monogenic human skin disorders
Citation: Dermatology, November 2014, vol./is. 229/2(55-64), 1018-8665;1421-9832 (19 Nov 2014)
Author(s): Lemke J.R., Kernland-Lang K., Horting K., Itin P.
Language: English
Abstract: Human genodermatoses represent a broad and partly confusing spectrum of countless rare diseases with confluent and overlapping phenotypes often impeding a precise diagnosis in an affected individual. High-throughput sequencing techniques have expedited the identification of novel genes and have dramatically simplified the establishment of genetic diagnoses in such heterogeneous disorders. The precise genetic diagnosis of a skin disorder is crucial for the appropriate counselling of patients and their relatives regarding the course of the disease, prognosis and recurrence risks. Understanding the underlying pathophysiology is a prerequisite to understanding the disease and developing specific, targeted or individualized therapeutic approaches. We aimed to create a comprehensive overview of human genodermatoses and their respective genetic aetiology known to date. We hope this may represent a useful tool in guiding dermatologists towards genetic diagnoses, providing patients with individual knowledge on the respective disorder and applying novel research findings to clinical practice.
Publication type: Journal: Review
Source: EMBASE
Full text: Available Dermatology (Basel, Switzerland) at No link? Ask Salisbury Healthcare Library - please click here to request article.

16. Myeloid-derived suppressor cells in malignant melanoma
Citation: JDDG - Journal of the German Society of Dermatology, November 2014, vol./is. 12/11(1021-1027), 1610-0379;1610-0387 (01 Nov 2014)
Author(s): Umansky V., Sevko A., Gebhardt C., Utikal J.
Language: English, German
Abstract: Melanoma is known for its rapid progression, metastasis to distant organs and therapeutic resistance. Despite high melanoma immunogenicity, the results of immunotherapeutic clinical studies are mostly unsatisfactory. One explanation is the development of strong immunosuppression mediated by highly immunosuppressive regulatory leukocytes, in particular, myeloid-derived suppressor cells (MDSCs). These cells were found to be enriched and activated in the melanoma microenvironment, inducing a profound impairment of anti-tumor immune responses and leading to the tumor progression. Therefore, understanding the mechanisms of MDSC generation, migration to the tumor site and activation as well as their targeting is important for the development of novel strategies for effective melanoma immunotherapy. We suggest that such therapeutic approaches should involve the inhibition of MDSC-
mediated immunosuppressive melanoma microenvironment combined with other immunologic treatments.

**Publication type:** Journal: Review  
**Source:** EMBASE  
**Full text:** Available *Journal der Deutschen Dermatologischen Gesellschaft = Journal of the German Society of Dermatology : JDDG* at [No link? Ask Salisbury Healthcare Library - please click here to request article.](#)

17. **Obstacles hindering the mainstream practice of teledermatopathology**  
**Citation:** Journal of the American Academy of Dermatology, October 2014, vol./is. 71/4(772-780), 1097-6787 (Oct 2014)  
**Author(s):** Giambrone D., Rao B.K., Esfahani A., Rao S.

**Language:** English  
**Abstract:** Teledermatopathology has the potential to link underserved areas to experts across the country and assist in making quick diagnoses, which may improve health care costs and delivery. Despite these potential benefits, teledermatopathology is not used routinely for primary diagnosis in the United States. To assess the current status of and address the potential for improving health care by the use of teledermatopathology for primary diagnosis. Current available literature and online resources were reviewed to address 3 major variables that hinder the widespread use of teledermatopathology: diagnostic accuracy, licensure requirements, and reimbursement. Recent studies show similar diagnostic accuracy for this technology compared to conventional microscopy. State-to-state variation and ambiguity in laws serve as the biggest hurdles to the widespread use of teledermatopathology. More states are recognizing the importance of the implementation of specific laws regarding telemedicine. More studies are required to evaluate the systems that offer specific telemedicine licenses, in addition to those that pay for telemedicine services specifically. This study reviewed current legislation concerning teledermatopathology; these laws are subject to revision. Improving diagnostic accuracy and limiting variations in policy and reimbursement may encourage more pathologists to use teledermatopathology technology. Copyright 2014 American Academy of Dermatology, Inc. Published by Elsevier Inc. All rights reserved.

**Publication type:** Journal: Review  
**Source:** EMBASE  
**Full text:** Available *Journal of the American Academy of Dermatology* at [No link? Ask Salisbury Healthcare Library - please click here to request article.](#)

18. **Pharmacological effects of vitamin D and its analogs: Recent developments**  
**Citation:** Drug Discovery Today, November 2014, vol./is. 19/11(1769-1774), 1359-6446;1878-5832 (November 2014)  
**Author(s):** Sintov A.C., Yarmolinsky L., Dahan A., Ben-Shabat S.

**Language:** English  
**Abstract:** Calcitriol, the hormonally active form of vitamin D, is well known for its diverse pharmacological activities, including modulation of cell growth, neuromuscular and immune function and reduction of inflammation. Calcitriol and its analogs exert potent effects on cellular differentiation and proliferation, regulate apoptosis and produce immunomodulatory effects. The purpose of this review is to provide information on various physiological and pharmacological activities of calcitriol and its newly discovered analogs. Special emphasis is given to skin diseases, cancer, diabetes and multiple sclerosis. A discussion is raised on the mechanisms of action of calcitriol and its analogs in various diseases, as well as on possible methods of delivery and targeting.

**Publication type:** Journal: Review  
**Source:** EMBASE  
**Full text:** Available *Drug discovery today* at [No link? Ask Salisbury Healthcare Library - please click here to request article.](#)

19. **Progress in psoriasis therapy via novel drug delivery systems**  
**Citation:** Dermatology Reports, 2014, vol./is. 6/1(15-19), 2036-7392;2036-7406 (2014)  
**Author(s):** Vincent N., Ramya Devi D., Vedha Hari B.N.

**Language:** English  
**Abstract:** Psoriasis is a lifelong condition which is caused by the negative signals produced by immune
system, which leads to hyper proliferation and other inflammatory reactions on the skin. In this case, keratinocytes which are the outermost layer of skin possess shortened life cycle and results in the alteration of desqua-mation process where the cytokines will come out through lesions of affected patients and as a result, scaling marks appears on the skin. These conditions may negatively affect the patient’s quality of life and lead to psychosocial stress. Psoriasis can be categorized as mild, moderate and severe conditions. Mild psoriasis leads to the formation of rashes, and when it becomes moderate, the skin turns into scaly. In severe conditions, red patches may be present on skin surface and becomes itchy. Topical therapy continues to be one of the pillars for psoriasis management. Drug molecules with target effect on the skin tissues and other inflammations should be selected for the treatment of psoriasis. Most of the existing drugs lead to systemic intoxication and dryness when applied in higher dose. Different scientific approaches for topical delivery are being explored by researches including emollient, modified gelling system, transdermal delivery, spray, nanogels, hydrogels, micro/nano emulsion, liposomes, nano capsules etc. These topical dosage forms are evaluated for various physico chemical properties such as drug content, viscosity, pH, extrudability, spreadability, toxicity, irritancy, permeability and drug release mechanism. This review paper focus attention to the impact of these formulation approaches on various anti-psoriasis drugs for their successful treatment.

Publication type: Journal: Review
Source: EMBASE
Full text: Available Dermatology Reports at No link? Ask Salisbury Healthcare Library - please click here to request article.

20 Psoriasis and the MAITing Game: A Role for IL-17A+ Invariant TCR CD8+ T Cells in Psoriasis
Citation: Journal of Investigative Dermatology, December 2014, vol./is. 134/12(2864-2866), 0022-202X;1523-1747 (13 Dec 2014)
Author(s): Johnston A., Gudjonsson J.E.
Language: English
Abstract: Recent findings have indicated that the majority of IL-17A+CD8+ T cells in the blood belong to a subset of innate T cells named mucosa-Associated invariant T cells (MAITs). In this issue, Teunissen and colleagues (2014) demonstrate that, although MAIT cells are found in psoriatic skin, they are not increased in abundance and that the majority of IL-17A+CD8+ T cells in plaques of psoriasis are devoid of MAIT cell characteristics.
Publication type: Journal: Review
Source: EMBASE
Full text: Available The Journal of investigative dermatology at No link? Ask Salisbury Healthcare Library - please click here to request article.

21. Recent advances in paediatric dermatology
Citation: Archives of disease in childhood, October 2014, vol./is. 99/10(944-948), 1468-2044 (Oct 2014)
Author(s): Khorsand K., Sidbury R.
Language: English
Abstract: The past year has produced several new clinical guidelines germane to paediatric dermatology, as well as important work related to rheumatologic overlap disorders, psoriasis comorbidities, pigmented lesions and quality of life impact. This review highlights common diagnoses and treatments useful for the practicing paediatrician. Published by the BMJ Publishing Group Limited. For permission to use (where not already granted under a licence) please go to http://group.bmj.com/group/rights-licensing/permissions.
Publication type: Journal: Review
Source: EMBASE
Full text: Available ARCHIVES OF DISEASE IN CHILDHOOD at No link? Ask Salisbury Healthcare Library - please click here to request article.

While most cancers have shown both decreased incidence and mortality over the past several decades, the incidence of melanoma has continued to grow, and mortality has only recently stabilized in the United States and in many other countries. Certain populations, such as men >60 years of age and lower socioeconomic status groups, face a greater burden from disease. For any given stage and across all ages, men have shown worse melanoma survival than women, and low socioeconomic status groups have increased levels of mortality. Novel risk factors can help identify populations at greatest risk for melanoma and can aid in targeted early detection. Risk assessment tools have been created to identify high-risk patients based on various factors, and these tools can reduce the number of patients needed to screen for melanoma detection. Diagnostic techniques, such as dermatoscopy and total body photography, and new technologies, such as multispectral imaging, may increase the accuracy and reliability of early melanoma detection. Copyright 2014 American Academy of Dermatology, Inc. Published by Elsevier Inc. All rights reserved.

New evidence has accumulated over the past several years that supports improved melanoma outcomes associated with both clinician and patient screening. Population-based and workplace studies conducted in Australia and the United States, respectively, have shown decreases in the incidence of thick melanoma and overall melanoma mortality, and a year-long statewide screening program in Germany has shown a nearly 50% reduction in mortality 5 years after the screening ended. Current melanoma screening guidelines in the United States are inconsistent among various organizations, and therefore rates of both physician and patient skin examinations are low. As policymaking organizations update national screening recommendations in the United States, the latest research reviewed in part II of this continuing medical education article should be considered to establish the most effective recommendations. Patient and provider education will be necessary to ensure that appropriate patients receive recommended screening. Copyright 2014 American Academy of Dermatology, Inc. Published by Elsevier Inc. All rights reserved.

The skin has recently been found to be an extra-Adrenal site for glucocorticoid (GC) synthesis that likely acts to modulate local inflammation. Psychological, physiological, and physical stress, both acute and chronic, triggers immune-protective or -damaging responses, including increases in systemic GC levels, which, according to Lin et al. (this issue), may be beneficial in inflammatory skin disease. However, little is known about the interplay between local and systemic production of GCs and the effect of stress (local or systemic) in regulating tissue-specific GC synthesis, its impact on skin homeostasis, and its effect of skin disease.
25. Targeting of interleukin-17 in the treatment of psoriasis

Citation: Clinical, Cosmetic and Investigational Dermatology, September 2014, vol./is. 7/(251-259), 1178-7015 (15 Sep 2014)

Author(s): Lonnberg A.S., Zachariae C., Skov L.

Language: English

Abstract: "Psoriasis" is a chronic immune-mediated inflammatory disorder with epidermal hyperplasia. There is some evidence that the cytokine interleukin-17A (often known as IL-17), which is mainly produced by Th17 cells, has a role in the pathogenesis of psoriasis. "IL-17" is a pro-inflammatory cytokine mainly important in the host's defense against extracellular bacteria and fungi. The three new therapies with biologic drugs - brodalumab, secukinumab, and ixekizumab - all target the IL-17 signaling pathway. Secukinumab and ixekizumab neutralize IL-17A, while brodalumab blocks its receptor. Results from clinical trials have shown marked improvements in disease severity in patients with moderate-to-severe plaque psoriasis, using any of these three drugs. The biologic agents were generally well tolerated, but the duration of the trials was relatively short. In this review, we focus on the role of the IL-17 cytokine family in the pathogenesis of psoriasis; the efficacy, safety, and tolerability of brodalumab, secukinumab, and ixekizumab in clinical trials; and possible differences between targeting of the IL-17A receptor and targeting of the IL-17A ligand.

26. The associations of triclosan and paraben exposure with allergen sensitization and wheeze in children

Citation: Allergy and Asthma Proceedings, November 2014, vol./is. 35/6(454-461), 1088-5412;1539-6304 (01 Nov 2014)

Author(s): Spanier A.J., Fausnight T., Camacho T.F., Braun J.M.

Language: English

Abstract: Triclosan and parabens are chemicals used in personal care and medical products as microbicides and preservatives. Triclosan and paraben exposure may be associated with allergy (atopy), but these associations have not been evaluated with respect to other atopic states such as eczema (atopic dermatitis). This study examines the associations of urinary triclosan and paraben concentrations with allergic sensitization and asthma in children. We performed a cross-sectional analysis of U.S. children aged 6-18 years who participated in the National Health and Nutrition Examination Survey (2005-2006). Triclosan and paraben concentrations were measured in urine. We assessed associations of triclosan and parabens with allergic sensitization and asthma using multivariable logistic regression in 837 children with complete data and stratified our results by eczema status. After covariate adjustment, triclosan and methyl and propyl paraben concentrations were positively associated with the odds of aeroallergen sensitization. Eczema did not significantly modify the association between triclosan or paraben levels and aeroallergen sensitization, asthma, or wheeze. The odds of parent-reported atopic asthma increased 34% (95% CI, 0.81) across triclosan concentration quartiles. Increasing triclosan concentrations (quartiles) were associated with 2.3 times the odds of food sensitization (95% CI, 1.14, 4.44) among children with eczema, but not among children without eczema (OR, 1.25; 95% CI 0.93, 1.68; effect measure modification, p = 0.04). Triclosan and paraben exposures may increase the risk of atopic asthma and aeroallergen sensitization. Prospective studies are necessary to confirm these findings and determine if these chemicals pose a risk to children's health.
27. The risk of deep fungal infections during biologic therapy for psoriasis

Citation: Journal of the European Academy of Dermatology and Venereology, October 2014, vol./is. 28/10(1277-1285), 0926-9959;1468-3083 (01 Oct 2014)

Author(s): Jourabchi N., Adelzadeh L., Wu J.J.

Language: English

Abstract: With a growing understanding of the pathogenesis and immunological basis of psoriasis, the medical community has seen the development of more focused biological treatment options for patients suffering from the disease, which are beginning to revolutionize the treatment of psoriasis. It is already well known that certain biologics are associated with an increased risk of reactivating tuberculosis in patients with latent disease, however, with increasing use of biologic agents across indications, there has also been a rise in reports of associated deep fungal infections. The mechanism of action of these biologic anti-psoriatic therapies allows physicians to address the underlying cause of patients' symptoms. The question though, is whether this same therapeutic mechanism may predispose patients to serious infections, including deep fungal infections.

Publication type: Journal: Review

Source: EMBASE

Full text: Available Journal of the European Academy of Dermatology and Venereology: JEADV at No link? Ask Salisbury Healthcare Library - please click here to request article.

28. Topical steroid addiction in atopic dermatitis

Citation: Drug, Healthcare and Patient Safety, October 2014, vol./is. 6/(131-138), 1179-1365 (14 Oct 2014)

Author(s): Fukaya M., Sato K., Sato M., Kimata H., Fujisawa S., Dozono H., Yoshizawa J., Minaguchi S.

Language: English

Abstract: The American Academy of Dermatology published a new guideline regarding topical therapy in atopic dermatitis in May 2014. Although topical steroid addiction or red burning skin syndrome had been mentioned as possible side effects of topical steroids in a 2006 review article in the Journal of the American Academy of Dermatology, no statement was made regarding this illness in the new guidelines. This suggests that there are still controversies regarding this illness. Here, we describe the clinical features of topical steroid addiction or red burning skin syndrome, based on the treatment of many cases of the illness. Because there have been few articles in the medical literature regarding this illness, the description in this article will be of some benefit to better understand the illness and to spur discussion regarding topical steroid addiction or red burning skin syndrome.

Publication type: Journal: Review

Source: EMBASE


29. Use of Biologic Agents in Combination with Other Therapies for the Treatment of Psoriasis

Citation: American Journal of Clinical Dermatology, November 2014, vol./is. 15/6(467-478), 1175-0561;1179-1888 (21 Nov 2014)

Author(s): Cather J.C., Crowley J.J.

Language: English

Abstract: Psoriasis is a chronic inflammatory skin disorder, which is associated with a significant negative impact on a patient's quality of life. Traditional therapies for psoriasis are often not able to meet desired treatment goals, and high-dose and/or long-term use is associated with toxicities that can result in end-organ damage. An improved understanding of the involvement of cytokines in the etiology of psoriasis has led to the development of biologic agents targeting tumor necrosis factor (TNF)-alpha and interleukins (ILs)-12/23. While biologic agents have improved treatment outcomes, they are not effective in all individuals with psoriasis. The combination of biologic agents with traditional therapies may provide improved therapeutic options for patients who inadequately respond to a single drug or when efficacy may be increased with supplementation of another treatment. In addition, combination therapy may reduce safety concerns and cumulative toxicity, as lower doses of individual agents may be efficacious when used together. This article reviews the current evidence available on the efficacy and safety of combining biologic agents with systemic therapies (methotrexate, cyclosporine, or retinoids) or with phototherapy,
and the combination of biologic agents themselves. Guidance is provided to help physicians identify situations and the characteristics of patients who would benefit from combination therapy with a biologic agent. Finally, the potential clinical impact of biologic therapies in development (e.g., those targeting IL-17A, IL-17RA, or IL-23 alone) is analyzed.

**Publication type:** Journal: Review  
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**Publication type:** Journal: Review  
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**30. Vitamin D supplementation: A potential booster for urticaria therapy**  
**Citation:** Expert Review of Clinical Immunology, October 2014, vol./is. 10/10(1269-1271), 1744-666X;1744-8409 (01 Oct 2014)  
**Author(s):** Rorie A., Poole J.A.  
**Language:** English  
**Abstract:** Chronic urticaria is a common skin condition whereby the etiology remains largely idiopathic and the mainstay therapy is symptomatic control with antihistamines. There have been a limited number of small studies suggesting a potential role for vitamin D in chronic urticaria, and this this editorial review will discuss the current supporting evidence. Associations for decreased serum vitamin 25 hydroxyvitamin D levels in subjects with chronic urticaria have been reported. In addition to observational reports, there has been a randomized, prospective, blinded trial demonstrating symptom improvement when high vitamin D3 supplementation was utilized as an add-on therapy for urticarial management. More research is needed to address mechanisms of action and to investigate vitamin D supplementation in larger and longer duration human trials.

**Publication type:** Journal: Review  
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**Full text:** Available *Expert review of clinical immunology* at No link? Ask Salisbury Healthcare Library - please click here to request article.
31. What is new in atopic dermatitis/eczema?

Citation: Expert Opinion on Emerging Drugs, December 2014, vol./is. 19/4(441-458), 1472-8214;1744-7623 (01 Dec 2014)

Author(s): Plotz S.G., Wiesender M., Todorova A., Ring J.

Language: English

Abstract: Introduction: Atopic eczema (AE) is a chronic relapsing inflammatory skin condition and one of the most common, potentially debilitating diseases with increasing incidence. Areas covered: The complex etiology of AE with multiple systemic and local immunologic and inflammatory responses and interactions between susceptibility genes and environmental factors leading to defects in skin barrier function and eczematous skin lesions is presented. Knowledge of pathogenesis is important for understanding the more innovative treatment approaches discussed. Expert opinion: Basic therapy consists of hydrating topical treatment and avoidance of specific and unspecific provocation factors. For acute eczematous skin lesions, anti-inflammatory treatment consists mainly of topical glucocorticoids and topical calcineurin inhibitors. Microbial colonization and superinfection may induce skin exacerbation, which can be treated by either topical or systemic antimicrobial treatment. Systemic anti-inflammatory therapy is limited to severe cases and consists of systemic steroids, cyclosporine A or mycophenolate mofetil. Novel anti-inflammatory concepts that go beyond corticosteroids are in the early phases of development. There are targeted therapeutic approaches, such as cytokine and chemokine modulators, and it remains to be investigated how effective they will be and what side effects they may carry. Existing treatment modalities such as barrier repair therapy, topical immunosuppressive agents, antiseptic treatment as well as systemic treatment options are discussed. 2014 Informa UK, Ltd.

Publication type: Journal: Review
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19. Progress in psoriasis therapy via novel drug delivery systems

Citation: Dermatology Reports, 2014, vol./is. 6/1(15-19), 2036-7392;2036-7406 (2014)

Author(s): Vincent N., Ramya Devi D., Vedha Hari B.N.

Language: English

Abstract: Psoriasis is a lifelong condition which is caused by the negative signals produced by immune system, which leads to hyper proliferation and other inflammatory reactions on the skin. In this case, keratinocytes which are the outermost layer of skin possess shortened life cycle and results in the alteration of desquamation process where the cytokines will come out through lesions of affected patients and as a result, scaling marks appears on the skin. These conditions may negatively affect the patient's quality of life and lead to psychosocial stress. Psoriasis can be categorized as mild, moderate and severe conditions. Mild psoriasis leads to the formation of rashes, and when it becomes moderate, the skin turns into scaly. In severe conditions, red patches may be present on skin surface and becomes itchy. Topical therapy continues to be one of the pillars for psoriasis management. Drug molecules with target effect on the skin tissues and other inflammations should be selected for the treatment of psoriasis. Most of the existing drugs lead to systemic intoxication and dryness when applied in higher dose. Different scientific approaches for topical delivery are being explored by researches including emollient, modified gelling system, transdermal delivery, spray, nanogels, hydrogels, micro/nano emulsion, liposomes, nano capsules etc. These topical dosage forms are evaluated for various physico chemical properties such as drug content, viscosity, pH, extrudability, spreadability, toxicity, irritancy, permeability and drug release mechanism. This review paper focus attention to the impact of these formulation approaches on various anti-psoriasis drugs for their successful treatment.

Publication type: Journal: Review
Source: EMBASE
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