Search methods: Articles published in the last 30 years containing relevant key words were reviewed using PubMed and Medline. Associations between Infliximab, Adalimumab, Etanercept, TNF alpha inhibitors and Ustekinumab to Eosinophilic Dermatoses syndromes were reviewed.
Results: Our search revealed an association between 17 eosinophilic dermatoses patients and the drugs of interest. Out of 5 Wells' syndrome cases, four patients had an outbreak of the disease following treatment and one improved by the treatment. Six cases of Eosinophilic Fasciitis mostly had a positive reaction to the treatment. More associations were found among 4 cases of Churg-Strauss syndrome, one case of Granuloma Faciale and 1 case of Eosinophilic Pustular Folliculitis.
Conclusions: TNF alpha inhibitors and Ustekinumab may have a role in the treatment of eosinophilic dermatosis syndromes. These drugs may act as triggers among Wells' syndrome patients. Further investigation is needed. ●

JAK INHIBITORS FOR THE TREATMENT OF ALOPECIA AREATA

Yuval Ramot, Abraham Zlotogorski
Department of Dermatology, Hadassah Medical Center, Hebrew University of Jerusalem, The Faculty of Medicine, Jerusalem, Israel

JAK inhibitors are small molecules that are capable of blocking T-cell-mediated inflammation. They have been shown to be beneficial in several inflammatory conditions, such as rheumatoid arthritis, psoriasis and psoriatic arthritis. Treatment with three JAK inhibitors, ruxolitinib, baricitinib and tofacitinib, led to hair regrowth in alopecia areata patients, and similar effects have also been demonstrated in animal models for alopecia areata. Based on these data, JAK inhibitors have gained widespread popularity for the treatment of moderate-to-severe alopecia areata patients. Nevertheless, treatment with JAK inhibitors can lead to adverse events, with infections being the most worrisome. Furthermore, the durability of JAK inhibitors for alopecia areata is still unknown. Clinical trials with topical and systemic JAK inhibitors for alopecia areata are ongoing, and hopefully will provide us with better understanding of the safety and efficacy of these medications. If indeed these treatments will prove to be effective and safe, they might become the first FDA-approved treatment for alopecia areata. ●

Disclosures: Prof. Ramot received lecture fees from Novartis and Lilly.

ATOPIC DERMATITIS AS A PRIMARY EPIDERMAL DISEASE: CLINICAL IMPLICATIONS

Liat Samuelov, Eli Sprecher
Department of Dermatology, Tel-Aviv Sourasky Medical Center, Tel-Aviv, Israel

Atopic dermatitis (AD) is one of the most common inflammatory skin diseases in the western world. Multiple causes have been implicated in the pathogenesis of atopic dermatitis, however in the past years many studies have highlighted the pathogenic role played by abnormal skin barrier in patients with AD. Impaired skin barriers facilitate the penetration of environmental agents/allergens into the skin with resultant chronic inflammation and atopic march. Many components of the epidermal barrier are impaired in atopic dermatitis including intracellular proteins comprising the cornified cell envelope, inter-cellular lipids and their metabolism, inter-cellular junctions and desquamation process. Investigating skin barrier abnormalities and understanding the mechanisms for its maintenance, are crucial for improving the management of AD patients and preventing the development of atopic march. Here we review the latest developments in skin barrier dysfunction in AD with associated clinical implications. ●

SURROGACY – ITS MEDICAL, LEGAL AND ETHICAL ASPECTS

David Rabinerson[1], Adi Borovich[1], Arnon Wiznitzer[1,2]
[1]Helen Schneider's Hospital for Women, Rabin Medical Center
[2]Sackler Faculty of Medicine, Tel Aviv University, Tel Aviv, Israel

During July 2018, Israel went through a social turmoil due to the completion of the legislation of the surrogacy act which excludes gay men from the option of having their own children through surrogate pregnancy. Gay men were also outraged because this denial of the state means that such treatment will not be subsidized since these treatments are quite expensive. In light of the public and media mayhem following the above mentioned law, we revise the relevant literature regarding surrogate pregnancies, mainly for the social aspect of this issue. It seems that most women, who experience surrogate pregnancy, are not affected physically or mentally. However, these findings may not be relevant to surrogate women in underdeveloped countries who, sometimes, are doing it for the financial benefit. More specifically, this review deals with the new Israeli legislation, which incorporates in it religious elements, hence it prevents certain populations (such as gay men) from the only feasible possibility to become fathers. We emphasize that we describe the situation as it is presented in the current literature as spectators but not as judges. ●

We report a case of a patient who presented with bilateral chronic painful necrotic leg ulcers. A skin biopsy revealed histopathological findings compatible with calciphylaxis, a rare phenomenon accompanied by high morbidity and mortality. Treatment options are limited and are based mainly on case reports and small series, so further research is needed in this area. This case highlights the importance of a skin biopsy in the diagnosis of chronic ulcers.

LINEAR MYCOSIS FUNGOIDES IN A BLASCHKOID DISTRIBUTION

Yehonatan Kaplan[1], Ofer Sarig[1], Tom Rabinowitz[2], Janan Mohamad[1], Noam Shomron[2], Eli Sprecher[1], Ilan Goldberg[1]
[1]Department of Dermatology, Tel Aviv Sourasky Medical Center, Affiliated to the Tel-Aviv University, Tel Aviv, Israel
[2]Sackler Faculty of Medicine, Tel Aviv University, Tel Aviv, Israel

Mycosis fungoides (MF) is the most common type of primary cutaneous T cell lymphoma. Many clinicopathological variants of MF have been described in the literature, though only a few presented in a segmental pattern. There are several unique patterns of distribution of skin diseases, one of which is the Blaschko Lines. Congenital skin diseases develop in a Blaschkoid pattern due to mosaicism. In contrast, according to Happle, the development of acquired skin diseases in a similar pattern is explained by superimposed segmental manifestation – a process which involves mosaicism overlapping a preexisting congenital mutation. The theories by which previous case reports explained the segmental appearance of MF did not cover the molecular basis for their development.

We report a case of a patient who presented with MF in a unique segmental distribution consistent with the Blaschko lines. The patient was found to have an acquired mosaic mutation in GNAS gene exclusively in the involved skin which represents a superimposed segmental manifestation according to Happle's theory. This case demonstrates the hidden potential of these rare cases which allows a better understanding of the pathogenesis by which acquired diseases develop. This is a basis for further research that could help identify new therapeutic targets for MF and other diseases that share its genetic etiology.

EFFECTIVE TREATMENT FOR BULLOUS PEMPHIGOID WITH OMALIZUMAB

Michal Neumark[1], Yuval Tal[2], Abraham Zlotogorski[1], Vered Molho-Pessach[1]
[1]Department of Dermatology, [2]Clinical Immunology Unit, Division of Internal Medicine, Hadassah Medical Center, Hebrew University, Faculty of Medicine, Jerusalem, Israel

Bullous pemphigoid is a common autoimmune blistering disorder, characterized by sub-epidermal bullae formation, that tends to affect older patients. We report on a 78 -year-old male patient suffering from bullous pemphigoid, whose disease persisted despite treatment with potent topical corticosteroids, systemic tetracyclines, prednisone and azathioprine. Recently, omalizumab was reported to be effective in several patients with resistant bullous pemphigoid. Omalizumab is a monoclonal antibody against IgE, approved for the treatment of asthma and chronic urticaria and known for its excellent safety profile. The patient was treated accordingly with omalizumab for his bullous pemphigoid with dramatic and rapid regression of his disease.

RITUXIMAB FOR THE TREATMENT OF PEMPHIGUS – A REVIEW OF RECENT STUDIES AND PERSONAL EXPERIENCE FROM THE RABIN MEDICAL CENTER AND THE SHEBA MEDICAL CENTER

Daniel Mimouni[1,3], Sharon Baum[2,3]
[1]Dermatology Department, Rabin Medical Center, Beilinson Campus, Petah-Tikva
[2]Dermatology Department, Sheba Medical Center, Tel Hashomer, Ramat-Gan
[3]Both affiliated to the Sackler Faculty of Medicine, Tel Aviv University, Tel Aviv, Israel

Pemphigus is a chronic autoimmune bullous disease. To date there is no curative treatment for the disease. The standard treatment has been based on systemic corticosteroids and immune-suppressants. Rituximab is a monoclonal antibody against CD20 cells which leads to B cell depletion, resulting in decreased antibody production. In recent years increasing evidence on promising efficacy and safety of rituximab in the treatment of pemphigus has emerged. This review presents the key publications and the Israeli experience with rituximab treatment at the Rabin and the Sheba Medical Centers.

Disclosure: Prof. Daniel Mimouni participated in an advisory board of Roche.

SYSTEMIC REVIEW OF EOSINOPHILIC DERMATOSES PATIENTS TREATED WITH TNF-α INHIBITORS AND USTEKINUMAB

Mati Rozenblat, Michael Ziv
Department of Dermatology, Emek Medical Center, Afula, Israel

Background: Eosinophilic dermatoses syndromes are rare diseases with a prominent eosinophilic infiltration mechanism. These syndromes have several known treatments with limited success. Several physicians worldwide suggested possible advantages of using specific biological drugs, which are different from eosinophil targeted biotherapies as treatments for eosinophilic dermatoses syndromes. Others considered these drugs as possible triggers.

Study aim: This study aims to critically review the pros and cons of biological drugs as treatments and triggers of eosinophilic dermatoses.

SPOTLIGHT ON DERMATOLOGY: FROM BENCH TO BEDSIDE

Lev Pavlovsky, Emmilia Hodak
Division of Dermatology, Rabin Medical Center, Petah Tikva
Sackler Faculty of Medicine, Tel Aviv University, Tel Aviv, Israel

The articles appearing in this issue, authored by physicians from the 7 dermatology departments in Israel, reflect the evolution of the field of dermatology in recent years, from a mainly descriptive and quite narrow specialty with a relatively limited treatment arsenal to a multidimensional discipline encompassing a wide range of subspecialties. The accompanying advances in intense translational research have led to important breakthroughs in our understanding of the pathogenesis of skin diseases and the development of novel therapies.

XANTHOTRICHIA (YELLOWING OF THE HAIR) DUE TO MINOXIDIL TREATMENT

Anna Lyakhovitsky[1], Karin Warshavsky[1], Yaron Ben Mordechai[1], Felix Pavlotsky[1,2], Aviv Barzilai[1,2]
[1]Department of Dermatology, Chaim Sheba Medical Center, Tel Hashomer, Israel
[2]Sackler Faculty of Medicine, Tel-Aviv University, Israel

Different drugs can affect the hair. Among the various types of drug-induced hair changes, hair colour change is a rare phenomenon which is less reported in the literature. Hair colour changes include lightening of the hair, whitening or returning to the original colour and even change to a new colour.
In this article we report a patient presenting with hair yellowing due to topical treatment with minoxidil and discuss the phenomenon of drug-induced hair colour changes.

NEUTROPHILIC DERMATOSIS OF THE HANDS ASSOCIATED WITH CHRONIC LYMPHOCYTIC LEUKEMIA

Ibrahim Alatawneh, Alex Zvulunov
Department of Dermatology, Soroka University Medical Center, Ben-Gurion University of the Negev, Beer-Sheva, Israel

Neutrophilic dermatosis of the hands (NDH) is a rare localized variant of Sweet's syndrome occurring predominantly over dorsa of hands. Both Sweet's syndrome and its dorsal hand variant have been reported in association with malignancies, inflammatory bowel diseases, and drugs. We report a patient with neutrophilic dermatoses of dorsal hands associated with chronic lymphocytic leukemia (CLL).

DISSEMINATED CRYPTOCOCCOSIS IN A LIVER TRANSPLANT RECIPIENT DIAGNOSED BY TZANCK SMEAR

Efrat Solomon-Cohen[1,5], Yelena Didkovsky[2,5], Tomer Avni[3,4,5], Emilia Hodak[1,5], Rina Segal[1,5]
[1]Department of Dermatology, Beilinson Hospital, Rabin Medical Center, Petach Tikva, Israel
[2]The Pathology Institute, Beilinson Hospital, Rabin Medical Center, Petach Tikva, Israel
[3]The Department of Infectious Diseases, Beilinson Hospital, Rabin Medical Center, Petach Tikva, Israel
[4]Internal Medicine Department E, Beilinson Hospital, Rabin Medical Center, Petach Tikva, Israel
[5]Sackler Faculty of Medicine, Tel Aviv University, Tel Aviv, Israel

Cryptococcus neoformans is an opportunistic fungus which causes severe morbidity and mortality among immune-compromised patients. Cutaneous manifestations of systemic cryptococcosis are rare and may include a papulo-nodular rash, ulcers, cellulitis, molluscum contagiosum-like papules and more. The Tzanck smear is a well-known simple diagnostic test which can be performed bedside, in order to characterize cell cytology. Its classic use was in diagnosis of autoimmune blistering diseases or herpes virus infections. However, in recent years it has been used as an efficient diagnostic tool for other dermatologic conditions. We present a case of a 47-year old liver transplant recipient who presented with numerous cutaneous manifestations of disseminated cryptococcosis, initially diagnosed with bacterial cellulitis and non-melanoma skin cancer. With the aid of the Tzanck smear we rapidly established the correct diagnosis leading to swift treatment.

DERMATOLOGIC CONDITIONS IN MONOZYGOTIC TWINS

David Dias-Polak[1], Nadav Pam[1], Ziad Khamaysi[1], Emily Avitan-Hersh[1,2]
[1]Department of Dermatology, Rambam Health Care Campus, Haifa, Israel
[2]Bruce Rappaport Faculty of Medicine, Technion Institute of Technology, Haifa, Israel

Genetic twin studies may shed light on the genetic basis as well as environmental and epigenetic factors in disease pathogenesis. Herein, we present four pairs of monozygotic twins sharing similar phenotypes in three dermatologic conditions, and a literature review regarding twin studies in these diseases.

AT THE BOTTOM OF THE ULCER – THE IMPORTANCE OF A BIOPSY IN DIAGNOSING HARD TO TREAT ULCERS

Sofia Raiber[1], Nadav Pam[1], Ziad Khamaysi[1], Reuven Bergman[1,2], Emily Avitan-Hersh[1,2]
[1]Department of Dermatology, Rambam Health Care Campus, Haifa
[2]Technion - Israel Institute of Technology, Haifa