**019**

Herpes simplex virus infection in pemphigus patients: a prospective study  
M Bertolini1, M Fehrholz1, K Harada2, I Piccini1, A Gilhar3, S Mutu2 and M Bertolini1

This study aims to consider herpes simplex virus (HSV) infection in front of any severe, recalcitrant pemphigus and to remit in the significance of the unappropriate, unexpensive test with a high outcome. Prospective study over 15 months (September 2019 - November 2020), 8 cases of PV associated with HSV infection were collected. 1 case of seborrheic, 3 cases of folliculitis, 4 cases of vulgaris. PDPA score ranged between 23-102. Sex ratio F/M = 1, median age 48±5 years. The mean duration of PV was 5.5 months (2 patients were hospitalized for relapses and 6 had PV de novo). PV was confirmed on skin biopsy, direct and indirect immunofluorescence. The treatment was based on oralsteroids with azathioprine in 4 cases, rituximab in 3 cases. 3 of the patients had a history of VZV infection. HSV infection occurred with an average of 27.5 days after the onset of the treatment. Clinically herpetic lesions appeared as fissures, erosions and haemorrhagic crusts. The transnucleus was positive. Recovery was rapid in all patients treated with acyclovir/cidofovir. Association between HSV and PV may result from immunosuppressive therapies and/or a causative factor associated with treatment-resistant lesions. The mechanism of viral induction of autoimmunity can be explained in several ways including molecular mimicry. Upregulation of production of interferon and interleukins. High level of IFN γ leads to increased expression of IL2A on keratinocytes making the pemphigus antigen structural site active. Over production of IL4 and IL10 causes a shift of TH1 to TH2 response which potentiates antibodies. In conclusion Pemphigus is characterized by high level of IFN γ and IFN γ responses against a panel of autoantibodies as a major task for HSV invasion into tissue. These observations suggested the recognition of herpetic infection helps to avoid unnecessary changes of immunosuppressive treatment for presumed refractory pemphigus.

**020**

Sphingosine 1-phosphate receptor signalling promotes hair growth and inhibits perifollicular T-cell expansion and immune privilege collapse ex vivo  
K Wieber, R Pollmann, CL Zimmer, D Didona and M Hertl

We included only records of patients with detailed information on history, examination, biochemical, immunological, histopathological and radiological investigations. We analysed the medical records of 90 patients. The average age of the patients was 32 years. Seventy-five (82%) patients were female and the rest were male. Most of the patients presented with fever, joint pain and photosensitivity. Nearly all patients had lesions suggestive of cutaneous lupus erythematosus. Thirty-two (65%) patients had a positive Direct Coombs’s test, and twenty-five (52%) patients presented with leucopenia. Sixteen patients had thrombocytopenia. Forty-nine (94%) patients had an elevated erythrocyte sedimentation rate. Thirteen patients had proteinuria. However, none of our patients had lupus nephritis. Two patients had pericardial effusion, and three had pleural effusion. One patient had antibodies to lupus anticoagulant. Twelve patients had low C3 levels, and seven patients had low C4 levels. This retrospective analysis presents an insight into the manifestations of systemic lupus erythematosus in North India and sheds light on the disease status and treatment response.

**021**

A retrospective analysis of the clinical, biochemical, immunological, histopathological and radiological spectrum of Systemic Lupus Erythematosus at a tertiary care centre in North India  
N Azam1, A Arain2, Y Mozaffari1, M Islam1, R Naskar1, R Gupta1, B Khaitan1, N Khanna1 and G Sethuraman1

The objective of our study was to retrospectively analyse the clinical, biochemical, immunological, histopathological and radiological spectrum of Systemic Lupus Erythematosus (SLE) in North India. We retrospectively analysed the medical records of all patients who presented with SLE to a tertiary care centre in North India from January 2011 to August 2017. We included only records of patients with detailed information on history, examination, biochemical, immunological, histopathological and radiological investigations. We analysed the medical records of 90 patients. The average age of the patients was 32 years. Seventy-five (82%) patients were female and the rest were male. Most of the patients presented with fever, joint pain and photosensitivity. Nearly all patients had lesions suggestive of cutaneous lupus erythematosus. Thirty-two (65%) patients had a positive Direct Coombs’s test, and twenty-five (52%) patients presented with leucopenia. Sixteen patients had thrombocytopenia. Forty-nine (94%) patients had an elevated erythrocyte sedimentation rate. Thirteen patients had proteinuria. However, none of our patients had lupus nephritis. Two patients had pericardial effusion, and three had pleural effusion. One patient had antibodies to lupus anticoagulant. Twelve patients had low C3 levels, and seven patients had low C4 levels. This retrospective analysis presents an insight into the manifestations of systemic lupus erythematosus in North India and sheds light on the disease status and treatment response.

**022**

Exploring the potential of the novel IFNγ aptamer TAGCX-0003 as a treatment for alopecia areata in pre-clinical models  
M Fehrholz1, K Harada2, I Piccini1, A Gilhar3, S Mutu2 and M Bertolini1

Pre-treatment with 0.3nM TAGX-0003 also prevented 100IU/ml IFN γ g expression of IL2A on keratinocytes making the pemphigus antigen structural site active. Over production of IL4 and IL10 causes a shift of TH1 to TH2 response which potentiates antibodies. In conclusion Pemphigus is characterized by high level of IFN γ and IFN γ responses against a panel of autoantibodies as a major task for HSV invasion into tissue. These observations suggested the recognition of herpetic infection helps to avoid unnecessary changes of immunosuppressive treatment for presumed refractory pemphigus.

**023**

RNA sequencing of chronic GVHD skin lesions identifies TREM1 as a possible therapeutic target in lichen planus  
A Calugareanu1, J Lemasson1, H Zouali2, C Battail1, H Le Buanec1, R Pefault de La Tour1, M Fehrholz1, K Harada2, I Piccini1, A Gilhar3, S Mutu2 and M Bertolini1

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