EDITORIAL

Dermato-venereology in the year of coronavirus – Hot topics in research and patient care

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The year 2020 was the year of the coronavirus pandemic, and this has been reflected in JEADV. Yet at the same time, many papers on new and exciting developments have been published from all areas of our field; I would like to take the opportunity and guide you through some articles which I think deserve our special attention.

COVID-19 and Dermatology

Since the first report on cutaneous manifestations of COVID-19,[1] there has been a flood of papers describing not only specific skin manifestations like rashes, vasculitis disorders, pityriasis rosea[2,3,4] and others in affected patients, but also broader implications for the specialty.

Of special interest in spring was the epidemic occurrence of chilblain-like lesions, but often without detectable SARS-CoV-2 positivity. This phenomenon remains still enigmatic and may be connected with effects of the lockdown introduced in many countries.[5,6]

At the same time, people have been worried about particular risks for dermatologic patients, especially for those with inflammatory or malignant diseases to develop the symptoms of COVID-19 as well as the risk of immunomodulating treatments; the latter led to a variety of position statements for certain diseases, such as atopic dermatitis,[7] that give practical recommendations.

The risk for healthcare providers to develop skin diseases caused by personal protective equipment (e.g. masks) or frequent disinfectant application has also been discussed, along with the implications for daily life of dermatology departments or offices during a lockdown.

In venereology, the pandemic has brought remarkable developments; while many people assumed that STD would go down during the lockdown, this obviously was not the case as a study from Northern Italy showed: only the number of prophylactic visits went down but not the incidence of venereological diseases, in which syphilis even showed an increase.[8]

Oncology

The dramatic change in prognosis of late-stage malignant skin cancer due to the introduction of specific kinase inhibitors as well as PD1 inhibitors was a topic of interest in JEADV this year. It is noteworthy that the occurrence of cutaneous adverse reactions – as unpleasant as they may be – seems to represent a sign of better prognosis for the patient.[9]

Also the use of modern imaging techniques like FDG-PET allows better management; residual activity in FDG-PET in patients with metastatic melanoma has been shown to be a sign of poor prognosis with a high predictive value.[10]

Sonidegib and vismodegib are helpful in the treatment of locally advanced basal cell carcinoma but may trigger a number of severe adverse reactions.[11]

New imaging techniques like line-field confocal optical coherence tomography (LC-OCT) allow a deeper penetration and may offer new diagnostic opportunities.[12]

Laser speckle contrast imaging (LSCI) allows evaluation of microcirculation in skin transplants.[13]

Acne

The role of certain keratins as keratin 79 was studied in the formation of microcomedone which then contribute to comedogenesis in general. In a patient with dioxin poisoning, keratin 79 gene was highly repressed in the skin.[14]

In acne fulminans, the role of *Cutibacterium acnes* phylotypes was studied and found to play a minor role compared to the more important parameter of cutaneous immune reactivity.[15]

A novel deleting nicastrin mutation in the enzyme gamma-secretase seems to play a role in the development of hidradenitis suppurativa.[16]

Environmental influences

A systematic review found an association between pesticide use and development of cutaneous malignant melanoma.[17]

Atopic eczema

It is a problem that most dermatology textbooks are written for Caucasian skin. We know that the African phenotype of some diseases is quite different, such as in atopic dermatitis, and it was of interest that the Patient-Oriented SCORing for Atopic Dermatitis (PO-SCORAD) for black skin correlates well with SCORAD and is found to be a valuable tool.[18]

Among the many strategies to prevent atopic dermatitis, an interesting new phenomenon was described with the note that meconium contact through amniotic fluid might be a protective factor against atopic dermatitis in childhood.[19]

Psoriasis

The era of biologics continues to evolve with many articles on various target-oriented therapeutics in the field of psoriasis being published. Among others, risankizumab was found to be more effective than ustekinumab also in the patients who have shown no response to biologics in previous studies.[20]

In a cardiovascular cohort, the risk for metabolic syndrome in psoriasis was higher in women compared to men, while the risk of diabetes was equal for both sexes.[21]

Autoimmune diseases

The role of vascular involvement and the angiotensin pathway was studied in systemic sclerosis; it was found that an endogenous angiotensin II antagonist angiotensin-(1-7) is reduced in systemic sclerosis.[22]

A new biochip for indirect immunofluorescence was introduced with a high specificity for bullous pemphigoid (BP180), pemphigus vulgaris (Dsg3) and pemphigus foliaceus (Dsg1).[23]

Brain–skin interactions are a major focus of research in the field of pruritus. In a study on mentally induced itch (by watching a video of scratching persons), patients with psoriasis showed a significantly higher intra-brain connectivity compared to healthy controls.[24]

Music intervention was found to be effective against itch showing a significant decrease in pruritus compared to a group treated with emollients only.[25]

Quality of life has been studied as important parameter of disease burden both in psoriasis and in atopic eczema. A new area of 'happiness research' may offer new insights – it has been shown that patients with psoriasis and atopic eczema experienced significantly lower levels of happiness (e.g. manifested by positive attention).[26]

Finally, a number of important guidelines have been published in 2020:

Topical photodynamic therapy.[27]
Management of lichen planus.[28]
Management of anogenital warts.[29]
Management of pemphigus vulgaris and foliaceus.[30]
Use of extracorporeal photopheresis.[31]
Systemic treatment of psoriasis.[32]

I hope that with this brief glance at my rather subjective selection of articles published in JEADV during the last year, you will be tempted to follow the progress in dermatology and venereology in our journal in the year 2021!

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