CIKKAJÁNLÓ

A Magyar Dermatológiai Társulat **tiszteletbeli tagjává** választotta **Dr. Errol PRENS**t 2017-ben

Figyelmükbe ajánljuk az alábbi írását, amit az IPC (International Psoriasis Council) oldalán olvashatnak:

Expert Opinion: Sex differences in immune responses that underlie COVID-19 disease outcomes

Does gender play a role in immune responses in COVID19 patients? Read this commentary by IPC Councilor Errol Prens to learn more.

PUBLICATION

Sex differences in immune responses that underlie COVID-19 disease outcomes. Takahashi T, Ellingson MK, Wong P, Israelow B, Lucas C, Klein J, Silva J, Mao T, Oh JE, Tokuyama M, Lu P, Venkataraman A, Park A, Liu F, Meir A, Sun J, Wang EY, Casanovas-Massana A, Wyllie AL, Vogels CBF, Earnest R, Lapidus S, Ott IM, Moore AJ; Yale IMPACT Research Team, Shaw A, Fournier JB, Odio CD, Farhadian S, Dela Cruz C, Grubaugh ND, Schulz WL, Ring AM, Ko AI, Omer SB, Iwasaki A. Nature. 2020 Dec;588(7837):315-320. doi: 10.1038/s41586-020-2700-3. Epub 2020 Aug 26. PMID: 32846427; PMCID: PMC7725931.

COMMENTARY

Because of the growing body of evidence indicating sex differences in the clinical outcomes of coronavirus disease 2019 (COVID-19) infection, the IMPACT Research Team from Yale University investigated sex differences in viral loads, SARS-CoV-2-specific antibody titers, plasma cytokines, as well as blood cell phenotyping in COVID-19 patients. They discovered essential differences in immune responses during the disease course of SARS-CoV-2 infection in male versus female patients. First, they found that the levels of important pro-inflammatory innate immune chemokines and cytokines such as IL-8, IL-18 (at baseline), and CCL5 (longitudinal analysis) were higher in male patients, which correlated with more elevated non-classical monocytes (at baseline) and more severe disease. Second, they observed a more robust T cell response among female patients than male patients at baseline. Collectively, their data suggest that vaccines and therapies to elevate T cell immune response to SARS-CoV-2 might be warranted for male patients. In contrast, female patients might benefit from therapies that dampen innate immune activation early during disease. The immune landscape in COVID-19 patients is considerably different between the sexes. They conclude that these differences may underlie heightened disease susceptibility in men.

The authors recognize an important limitation of their study: healthy healthcare workers who served as controls were not matched to patients based on age, BMI, or underlying risk factors. Despite their corrections for those confounders in their statistical analyses, residual confounding is not ruled out due to underlying risk factors not available for the healthcare workers' controls. The limited sample size of this study is an explicit limitation.