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IN BRIEF

COVID-19

Macrophages: a Trojan horse in COVID-19?

Patients with severe COVID-19 exhibit marked lymphopenia. This preprint by Feng et al. used immunohistochemistry and immunofluorescence to characterize hilar and subscapular lymph nodes and spleens post-mortem from six patients who died from COVID-19. In addition to splenic and lymph node atrophy and necrosis, the authors reported significant lymphocytic apoptosis. Of note, ACE2-expressing CD68+CD169+ macrophages were detected in the splenic marginal zone and in marginal sinuses of lymph nodes, and these macrophages contained SARS-CoV-2 nucleoprotein antigen and showed upregulation of IL-6. Virally infected tissues also showed higher expression of FAS. This suggests that CD169⁺ macrophages could contribute to viral spread, excessive inflammation and activation-induced lymphocytic cell death during SARS-CoV-2 infection.

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 $\textbf{ORIGINAL ARTICLE} \ \mathsf{Feng}, \mathsf{Z}. \ \mathsf{et al}. \ \mathsf{The novel severe acute respiratory } \ \mathsf{syndrome}$

 $coronavirus\ 2\ (SARS-CoV-2)\ directly\ decimates\ human\ spleens\ and\ lymph\ nodes.\ Preprint$ at medRxiv https://doi.org/10.1101/2020.03.27.20045427 (2020)