ACE2 Polymorphisms Reflected on the Immune and Apelinergic Peptide Systems: Potential COVID-19 Tools for Risk Stratification and Therapy.

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Abstract

ACE2 polymorphisms have been previously linked to increased susceptibility to multiple diseases and are currently linked to SARS CoV-2 susceptibility and complications. Notably, ACE2 transcribed or regulated proteins include the activity of metaloproteinsase-2 and apelin-13 and 36, might be linked to abnormal immune responses and complications. Potential genetic or serological tests might be developed to detect the higher vulnerable groups to SARS CoV-2 complications and/or mortality. Moreover, we postulate that diabetic and obese patients suffer from exhausted and/or abnormally functioning apelinergic peptides that predispose them to a higher severe COVID-19 risk. Finally, infusion of apelin-13 to treat selected critical cases of COVID-19, especially those complaining of refractory advanced heart failure, might be considered for clinical trials.

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`SARS CoV-2 apelinergic link updated.pdf` available at https://authorea.com/users/318758/articles/522100-ace2-polymorphisms-reflected-on-the-immune-and-apelinergic-peptide-systems-potential-covid-19-tools-for-risk-stratification-and-therapy