

Pathogenetic Mechanism of Procalcitonin in COVID-19

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Dear Sir,

In the Editorial by Savio entitled "Procalcitonin (in COVID-19): The Incessant Quest," the author wrote that the pathogenetic mechanism for the cause–effect of procalcitonin (PCT) to raise the risk of developing a severe disease remains to be proved.¹

The author wants to point to two previously published studies. In the year 2002, the results of an *in vitro* study revealed that *in vitro* PCT is a monocyte chemoattractant that deactivates chemotaxis in the presence of additional inflammatory mediators. Nylén et al. demonstrate that increased PCT exacerbates mortality in experimental sepsis, whereas neutralization of PCT increases survival. Thus, PCT, in addition to being an important marker of severity of systemic inflammation and mortality, is an integral part of the inflammatory process and directly affects the outcome.^{2,3}

Our institution has the laboratory possibility to investigate fragments of PCT in a bioassay in order to determine the active part of the peptide PCT. In the future, there is the option to create an agonist and antagonist of PCT. This new molecule should be able to influence the pathogenetic role of PCT in severe sepsis.

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