New insights on inflammation in COVID-19

21 April 2021

Credit: CC0 Public Domain

Severe cases of COVID-19 can involve extensive inflammation in the body, and clinicians have wondered if this state is similar to what are called cytokine storm syndromes, in which the immune system produces too many inflammatory signals that can sometimes lead to organ failure and death. A new study published in *Arthritis & Rheumatology* indicates that different markers in the blood clearly differentiate excessive inflammation in critical COVID-19 from cytokine storm syndromes.

The research, which was led by investigators at University Children's Hospital Muenster in Germany, will be useful when deciding which medications to use in different patients. For example, targeting some key molecules and pathways associated with [cytokine](link) storm syndromes may not be effective for treating patients with COVID-19.

"When we first became aware of a possible association of particularly critical COVID-19 with cytokine storm, this was intriguing for us, as in the field of autoinflammation we are treating and investigating such conditions on a regular basis," said lead author Christoph Kessel, Ph.D.

"Our present research delivers broad insights on the nature and significance of systemic hyperinflammation following SARS-COV-2 infection," added co-lead author Richard Vollenberg, MD. "We consider this relevant as we still lack proper angles of attack to treat critically ill patients."

More information: *Arthritis & Rheumatology*, [DOI: 10.1002/art.41763](link)

Provided by Wiley

APA citation: New insights on inflammation in COVID-19 (2021, April 21) retrieved 3 June 2022 from https://medicalxpress.com/news/2021-04-insights-inflammation-covid-.html