



Does the concurrent use of ibuprofen worsen COVID-19 symptoms?

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KEY FINDINGS

- Currently, there are no direct evidence from published scientific studies to determine whether the acute use of Ibuprofen is related to increased risk of COVID-19 or of a more severe disease. There are only anecdotal case reports of 4 COVID-19 patients that suggested that Ibuprofen use maybe associated with worsening of symptoms.

- Currently, there are no direct evidence from published scientific studies to determine whether the acute use of Ibuprofen is related to increased risk of COVID-19 or of a more severe disease.
- The association of poor clinical outcome with the use of Ibuprofen is based on anecdotal reports of 4 patients in Europe who received NSAIDs early in the course of the disease and developed complications.
- WHO does not recommend against the use of Ibuprofen while the EMA advised in considering all available treatment options, the benefits and risks of each medicine including Paracetamol and NSAIDs (like Ibuprofen) for symptoms of fever or pain in COVID-19 patients.

RESULTS

There is no direct evidence found that the concurrent use of NSAIDs including ibuprofen in patients with COVID-19 is associated with increased mortality or worsening of symptoms. The association of poor clinical outcome with the use of Ibuprofen is based on anecdotal reports of 4 young patients in Europe who have received NSAIDs early in the course of the disease and developed complications.[1]

A rapid systematic review [2] conducted by WHO last March 20, 2020 examined the effect of NSAIDs on patients with viral respiratory infections including COVID-19, Middle East Respiratory Syndrome (MERS) and Severe Acute Respiratory Syndrome (SARS). 73 studies were included in the review but none were specifically among COVID-19, SARS and MERS patients. The review showed that the effects of NSAIDs on the risk for stroke and myocardial infarction in adults with acute respiratory infections are unclear. Studies comparing ibuprofen and paracetamol showed little or no difference among children with fever with regard to effects on death from all causes, hospitalization for any cause, acute renal failure, and acute gastrointestinal bleeding. The studies included did not report any serious adverse event with the use of NSAIDs.

WHO does not recommend against the use of ibuprofen[3]. European Medicine Agency advised in considering all available treatment options, the benefits and risks of each medicine including Paracetamol and NSAIDs (like Ibuprofen) for symptoms of fever or pain in COVID-19 patients [4].

CONCLUSION

Currently, there are no direct evidence from published scientific studies to determine whether the acute use of ibuprofen is related to increased risk of COVID-19 or of a more severe disease.

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