

Fenofibrates: A Safe and Novel Weapon Against Coronavirus-Induced Lung Fibrosis

Dear Editor,

Coronavirus-19 is a novel virus involving humans and animals in the world.^[1] According to chest radiography and chest computerized tomography (CT) scan, the lungs of patients with COVID-19 are infiltrative prone to lung fibrosis that may result in death.^[2] Therefore, prevention and early treatment of lung fibrosis are critical.

The infection, as well as Coronavirus-19, causes a surge in the production of IL-6, which is known to potently induce fibrosis via a STAT-3 dependent pathway.^[3] Therefore, blocking the fibrosis pathway can be a way to prevent lung fibrosis, as well as morbidity and mortality of the disease.

Fenofibrates are fibric acid derivative used for dyslipidemia, hypercholesterolaemia, and hypertriglyceridaemia.^[4] According to the literature, these drugs reduce C-reactive protein, fibrinogen, immunoglobulin G, tumor necrosis factor-alpha (TNF- α), interleukin-10 (IL-10), and interleukin-6 (IL-6) and inhibit the STAT3 pathway.^[5,6] Literature showed that gemfibrozil, a fenofibrate which used a lot, had significant effects in treatment of influenza and decrease in mortality rate due to this disease in mice model and these effects of fenofibrates were more remarkable in comparison with statin simvastatin.^[7]

In conclusion, there are several evidence that show the main cause of death due to COVID-19 is lung damage, lung fibrosis, and impaired ventilation. Therefore, it seems that phenofibrates can be a good choice to prevent lung fibrosis and death in patients with COVID-19.

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Conflicts of interest

There are no conflicts of interest.

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