

# Efficacy of Thymoquinone in COPD-Associated Non-Alcoholic Fatty Liver Disease

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Dear Editor;

Nonalcoholic fatty liver disease is an important health problem that often occurs in liver disease<sup>1</sup>. The frequency of diagnosis of non-alcoholic fatty liver disease has increased in COPD patients<sup>2</sup>. Chronic obstructive pulmonary disease (COPD) is a common disease that causes deterioration of the airways and alveoli as a result of exposure to harmful gases and genetic interaction. COPD is a disease with high morbidity and mortality rates despite current treatments<sup>3,4</sup>. Hypoxia and increased systemic inflammation are important in the development of COPD-associated non-alcoholic fatty liver disease<sup>2</sup>.

Thymoquinone is a bioactive component obtained from the seed of *nigella sativa*. Experimental studies have shown that thymoquinone is effective in lung damage models induced by cigarette smoke and hypoxia. In addition, thymoquinone has significant anti-inflammatory activity<sup>5</sup>. The efficacy of thymoquinone in the treatment of COPD is unknown. We think that thymoquinone may be effective in the prevention and treatment of COPD-associated non-alcoholic fatty liver disease. Therefore, further clinical and experimental studies on this subject are required.

## CONFLICT OF INTEREST

The authors report no conflict of interest.

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