

# Efficacy of Thymoquinone in the Treatment of COPD

Serdar Kalemci<sup>1)</sup>, Huriye Gulistan Bozdag<sup>2)</sup>, Arife Zeybek<sup>2)</sup>

Dear Editor;

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. Therefore, early diagnosis is very important and improvements in treatment are needed<sup>1,2)</sup>. Proinflammatory cytokines are released by activating cyclooxygenase-2 (COX 2) in COPD. In addition, in recent studies, it has been determined that defects in genes associated with tumor development develop during the disease process<sup>3)</sup>.

Thymoquinone is a bioactive component obtained from the seed of *nigella sativa*. Experimental studies have shown that it can be effective in the treatment of acute and chronic inflammatory diseases, including cancer. It has an anti-inflammatory effect, especially by inhibiting COX-2<sup>4)</sup>. The efficacy of thymoquinone in the treatment of COPD is unknown. However, in recent studies, its protective effect has been shown in mice with airway damage due to long-term exposure to cigarettes<sup>5)</sup>. We think that thymoquinone may be effective in the prevention and treatment of COPD. Therefore, further clinical and experimental studies on this subject are required.

## DISCLOSURE

The authors report no conflict of interest.

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1) Department of Anesthesia, Kocaeli University of Health and Technology, European Vocational School, Kocaeli, Turkey

2) Mugla Sitki Kocman University Medical School, Department of Chest Surgery, Mugla, Turkey

Correspondence to: Serdar Kalemci  
(e-mail: skalemci79@gmail.com)

ORCID ID:

Serdar Kalemci: 0000-0002-5246-972X