

The Effectiveness of Thymoquinone in the Prevention of Lung Diseases due to Gas/Fume Exposure

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Dear Editor;

The most common airway diseases due to gas/fume exposure are COPD and lung cancer^{1,2)}. COPD and lung cancer occur in people with genetic predisposition due to environmental exposure^{3,4)}. Although there are promising treatments, it is still insufficient^{2,5)}. Therefore, early diagnosis is very important and improvements in treatment are needed. 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 process⁶⁾. In addition, there is an increased cytokine release in lung cancer⁷⁾.

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-2⁷⁾. 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 cigarettes⁸⁾. We think that thymoquinone may be effective in the prevention and treatment of lung diseases due to gas/fume exposure. Therefore, further clinical and experimental studies on this subject are required.

DISCLOSURE

The authors report no conflict of interest.

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