

Letters to the Editor

Dear Editor

Menthol and aspirin-induced asthma

I read with interest the recent short report by Tamaoki *et al.* on the effect of menthol vapour in mild asthmatics (1). However, they did not comment on the effect of menthol in aspirin-induced asthma. Subiza *et al.* reported on an aspirin-sensitive patient whose asthma was exacerbated by the mint flavour contained in her toothpaste (2). They performed the challenge test and showed that the mint and menthol contained as flavouring in toothpastes may act as asthma-inducing agents.

I have experienced three patients with aspirin-induced asthma who also complained of dyspnoea when they brushed their teeth, chewed gum with mint flavour, or had a cough drop. I pointed out the resemblance of chemical structures in aspirin, parabens, and artificial flavours (3). Recently I encountered two more patients with aspirin-induced and mint-flavour-sensitive asthma. In one patient, the challenge test with his flavoured toothpaste was performed. Immediate response (decrease in FEV₁ from 4.30 l to 3.81 l) was obtained after he had used his toothpaste. A challenge was then performed with menthol, one of the components of the patient's toothpaste. The patient was instructed to rinse his mouth with 25 mg of menthol diluted in 50 ml of 5% alcohol for 1 min and then spit it out. Five minutes later, FEV₁ was decreased from 4.49 l to 4.08 l. The patient complained of tightness.

Therefore, it seems that menthol vapour does not have a beneficial effect on aspirin-induced asthma.

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Reply to Dr Kawane

We thank Dr Kawane for raising the possibility that menthol could deteriorate asthmatic symptoms in patients with aspirin- and mint-flavour-sensitive asthma. Although such patients were not included in our study, two patients complained of uncomfortable sensation in the upper airway immediately after menthol inhalation. These patients were withdrawn from our study protocol and, thus, we did not assess their airway reactivity. The mechanism of efficacy of menthol on airway hyper-responsiveness remains unknown, but this cyclic alcohol stimulates laryngeal cold receptors (1), inhibits cough reflex (2), stimulates airway epithelial Cl secretion through a Ca²⁺-dependent mechanism (3,4) and directly relaxes airway smooth muscle (unpubl. data). We speculate that these actions could be involved in the observed effect of menthol in our study.

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Dear Editor

Raised brain natriuretic peptide in pulmonary hypertension

The interesting observations on brain natriuretic peptide (BNP) in association with pulmonary hypertension as described recently (1) raises the issue