

# Beneficial Effect of Combination Therapy with Ozagrel and Pranlukast in Exercise-induced Asthma Demonstrated by Krypton-81m Ventilation Scintigraphy—A Case Report

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## Abstract

**Introduction:** We evaluated the effect of combination therapy with thromboxane A<sub>2</sub> synthesis inhibitor and leukotriene receptor antagonist in a patient with exercise-induced asthma using krypton-81m ventilation scintigraphy. **Clinical Picture:** In a patient with exercise-induced asthma, we found exercise-induced abnormalities of respiratory function test and ventilation scintigraphy, and increases in plasma concentrations of thromboxane B<sub>2</sub> and leukotriene C<sub>4</sub> with exercise. **Treatment:** A thromboxane A<sub>2</sub> synthesis inhibitor (ozagrel) and a leukotriene receptor antagonist (pranlukast) were prescribed. **Outcome:** After treatment for 2 weeks, abnormalities of respiratory function test and ventilation scintigraphy improved. **Conclusions:** The combination therapy with ozagrel and pranlukast might be useful for the relief of symptoms in patients with exercise-induced asthma, and krypton-81m ventilation scintigraphy could be a useful tool for visible evaluation of treatment.

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**Key words:** Leukotriene C<sub>4</sub>, Leukotriene receptor antagonist, Thromboxane A<sub>2</sub> inhibitor, Thromboxane B<sub>2</sub>

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