

FULL TEXT LINKS



Comparative Study [Pediatr Neonatol.](#) 2008 Oct;49(5):171-8.

doi: [10.1016/S1875-9572\(09\)60004-8](https://doi.org/10.1016/S1875-9572(09)60004-8).

# Effects of the immunomodulatory agent *Cordyceps militaris* on airway inflammation in a mouse asthma model

[Chia-Hsiu Hsu](#)<sup>1</sup>, [Hai-Lun Sun](#), [Ji-Nan Sheu](#), [Min-Sho Ku](#), [Chun-Ming Hu](#), [You Chan](#), [Ko-Huang Lue](#)

Affiliations

PMID: 19133568 DOI: [10.1016/S1875-9572\(09\)60004-8](https://doi.org/10.1016/S1875-9572(09)60004-8)

[Free article](#)

## Abstract

**Background:** *Cordyceps militaris* is a well-known fungus with immunomodulatory activity. It is generally used in traditional Chinese medicine to treat hemoptysis, bronchial or lung inflammation, and urogenital disorders. The purpose of our study was to evaluate the effect of cultivated *C. militaris* on airway inflammation in a mouse asthma model.

**Methods:** BALB/c mice were sensitized with intraperitoneal ovalbumin (OVA) on Days 0 and 14, and were then given intranasal OVA on Day 14 and Days 25-27. Randomized treatment groups of sensitized mice were administered *C. militaris*, prednisolone, montelukast, or placebo by gavage from Days 15-27. Airway hyperreactivity to aerosolized methacholine was determined. Bronchoalveolar lavage fluid and serum were analyzed to assess airway inflammation.

**Results:** OVA-sensitized mice developed a significant airway inflammatory response that was inhibited by prednisolone and montelukast, whilst *C. militaris* reduced airway inflammation less effectively. Airway hyperresponsiveness to methacholine was observed in OVA-sensitized mice and was reversed by both prednisolone and montelukast. *C. militaris* initially reversed airway hyperreactivity, but this effect disappeared at higher methacholine doses.

**Conclusion:** *C. militaris* can modulate airway inflammation in asthma, but it is less effective than prednisolone or montelukast. These results demonstrate that *C. militaris* is unable to adequately block the potent mediators of asthmatic airway inflammation.

[PubMed Disclaimer](#)

## Related information

[Cited in Books](#)

[PubChem Compound](#)

[PubChem Compound \(MeSH Keyword\)](#)

[PubChem Substance](#)

## LinkOut – more resources

Full Text Sources

[Elsevier Science](#)

**Other Literature Sources**

[The Lens - Patent Citations](#)

**Medical**

[MedlinePlus Consumer Health Information](#)

[MedlinePlus Health Information](#)