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## LUNG ALERT .....

### Asthma may protect against autoimmune diseases

▲ Tirosh A, Mandel D, Mimouni FB, et al. Autoimmune disease in asthma. *Ann Intern Med* 2006;144:877-83

In this cross sectional study, data from the Israeli Defence Force database were used to analyse the prevalence of autoimmune disorders in asthmatic and non-asthmatic military personnel between 1980 and 2003. Of the 488 841 individuals enrolled, significantly more women than men had autoimmune disorders. When comparing all autoimmune disorders together there was statistically significant evidence that autoimmune disorders were less prevalent in asthmatics across both sexes (prevalence 137.4/10 000 in non-asthmatics v 93.3/10 000 in asthmatics; risk ratio 1.48 (95% CI 1.33 to 1.64), p<0.001). The study showed that there was a significantly lower prevalence of all autoimmune disorders except antiphospholipid syndrome in asthmatic women, and a lower prevalence of type 1 diabetes, vasculitis, and rheumatoid arthritis in asthmatic men than in their non-asthmatic counterparts. A follow up study tracing newly diagnosed autoimmune diseases showed varying incidence levels, generally lower in asthmatic subjects, depending on sex and type of autoimmune disorder.

This research suggests that asthma may affect the occurrence of autoimmune disorders depending on the disease and sex of the individual, with asthma generally being protective. The theory is that a T helper 2 weighted imbalance favours an allergic response that may protect against T helper 1 mediated autoimmune diseases.

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