Correspondence

Exercise-induced asthma without respiratory heat loss

Sir,—We read with interest the case report by Dr I Ben-Dov and colleagues entitled “Exercise-induced asthma without respiratory heat loss” (August 1982, p 630). Their observations are consistent with our own data showing that bronchoconstriction occurs without respiratory heat loss in patients breathing ultrasonically nebulised distilled water, even if tidal breathing alone is employed.

We believe that this response is directly related to the inhalation of water in the form of droplets, and we would suggest that this rather than exercise was the stimulus to bronchoconstriction under the humidified conditions used by these authors. Previous work has shown that isotonic saline does not provoke bronchoconstriction, and the tonicity of inhaled fluids may have important implications for the variation in response to exercise under different climatic conditions.

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A copy of this letter was sent to Dr Ben-Dov and his colleagues, who reply below.

Sir—We are aware of the observations from Dr Schoeffel and her colleagues on the ability of hypotonic and hypertonic water to induce bronchospasm, but they and Dr Godden and his colleagues used ultrasonic nebulisers, which deliver very large amounts of water to the respiratory tract. We used the same simple humidifier type of nebuliser in all our previous studies in which the breathing of warm, humid air was shown to inhibit exercise-induced asthma. We cannot accept therefore that the water rather than the exercise caused the asthma in the present case.

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