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"Drink plenty of fluids": a systematic review of evidence for this recommendation in acute respiratory infections

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“Drink plenty of fluids”: a systematic review of evidence for this recommendation in acute respiratory infections

Michelle P B Guppy, Sharon M Mickan, Chris B Del Mar

Doctors often recommend drinking extra fluids to patients with respiratory infections. Theoretical benefits for this advice are replacing insensible fluid losses from fever and respiratory tract evaporation, correcting dehydration from reduced intake, and reducing the viscosity of mucus.1-7 To many this advice is self-evident and justified on the basis that even if the benefit is uncertain, or at best small, at least it is harmless.

However, there are theoretical reasons for increased fluid intake to cause harm. Antidiuretic hormone conserves fluid by stimulating water reabsorption from the renal collecting ducts. Increased antidiuretic hormone secretion has been reported in adults and children with lower respiratory tract infections of bronchitis, bronchiolitis, and pneumonia (DIABHYCAR study; design, organization, and patient recruitment. DIABHYCAR Study Group, Control Clin Trials 2000;21:855-6).

Several mechanisms have been proposed for this increased hormone secretion, acting through fever, hypoxia, hypercapnia, pain, emotion, or nausea. Secretion may be stimulated by a resetting of osmostat hypoxia, hypercarbia, pain, emotion, or nausea. Increased hormone secretion, acting through fever, also occurs in upper respiratory tract infections.

The non-insulin-dependent diabetes, hypertension, microalbuminuria or proteinuria, cardiovascular events, and ramipril (DIABHYCAR study; design, organization, and patient recruitment. DIABHYCAR Study Group, Control Clin Trials 2000;21:855-6).


Effect of statin treatment for familial hypercholesterolaemia on life assurance: results of consecutive surveys in 1990 and 2002

H A W Neil, T Hammond, D Mant, S E Humphries

One of the concerns often raised about genetic testing is the possibility that a positive result (or even disclosing that the test has been taken) may result in difficulty in obtaining life assurance. Currently the UK insurance industry has declared a moratorium on requiring genetic tests from applicants, but since DNA based tests offer a definitive, highly specific diagnosis they are likely eventually to replace less specific clinical diagnostic criteria for many inherited disorders. Early, presymptomatic treatment may increase life expectancy by preventing or reducing the risk of developing the disease or associated complications. However, if life assurance policy premiums do not adequately reflect the reduction in mortality with treatment relatives of affected probands may be deterred from being tested. We examined how life assurance companies have affected probands may be deterred from being tested. Until we have this evidence, we should be cautious about universally recommending increased fluids to patients, especially those with infections of the lower respiratory tract.

Comment

We found data to suggest that giving increased fluids to patients with respiratory infections may cause harm. To date there are no randomised controlled trials to provide definitive evidence, and these need to be done. Until we have this evidence, we should be cautious about universally recommending increased fluids to patients, especially those with infections of the lower respiratory tract.


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