

may contribute to an increased risk of cognitive decline in older persons require further investigation.

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## Cardiovascular abnormalities in hyperthyroidism

*To the Editor:*

We read with interest the study by Merce and colleagues entitled “Cardiovascular abnormalities in hyperthyroidism: a prospective Doppler echocardiographic study.”<sup>1</sup> The study is clearly presented and covers a very important condition that is known to cause significant vascular morbidity.<sup>2</sup> We have previously reported excess vascular mortality in overt hyperthyroidism despite antithyroid therapy,<sup>3</sup> suggesting ongoing vascular risk. Merce et al conclude in their study that patients with hyperthyroidism have a high prevalence of pulmonary hypertension and atrioventricular valve regurgitation, which usually corrects after treatment of hyperthyroidism.<sup>1</sup> However, we would like to raise a few points regarding their study.

The study recruited a total of only 39 hyperthyroid patients and 39 age- and sex-matched controls over a 2-year period (November 1999–November 2001). No comment is made about whether the patients recruited were consecutive and unselected; also, no comment is made about the number of patients who refused to participate in the study. A total of 39 hyperthyroid patients over a 2-year period (about 20 per year) suggests that this is a highly selected cohort and may not be truly representative of the larger hyperthyroid population. This may clearly distort the findings of the study and could explain the higher prevalence of echocardiographic abnormalities demonstrated by the study.

Further evidence that the hyperthyroid cohort recruited may not be truly representative is suggested by the prevalence of atrial fibrillation reported in the study. Merce et al report an atrial fibrillation prevalence of 18% among hyperthyroid patients at recruitment. However, this prevalence is much higher than the prevalence of atrial fibrillation reported by a recent large Danish study. Frost et al reported that among 40 628 patients with hyperthyroidism, 8.3% were diagnosed as having atrial fibrillation/atrial flutter within 30 days from the date of diagnosis of hyperthyroidism;<sup>4</sup> this is much lower than the prevalence reported by Merce and colleagues, suggesting that patients in the latter study had a much higher prevalence of structural heart disease, even though they did exclude those with previously known cardiac or pulmonary disease. No mention is made about the possible causes of the echocardiographic abnormalities detected in hyperthyroid patients and the authors do acknowledge this in their discussion.

We congratulate the authors on attempting to study a common multi-system disorder that is increasingly being recognized to have short- and long-term consequences, especially on the cardiovascular system. Although we welcome the study findings, larger prospective controlled trials are needed to identify cardiovascular abnormalities in this cohort of patients and identification of those at particular risk of longer-term vascular morbidity and mortality.

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## Doctors and the drug industry: Reader feedback

*To the Editor:*

We read with interest the editorial<sup>1</sup> by Dr. Alpert in *The American Journal of Medicine* February 2005 issue. The