THYROID DISEASE IN THE ELDERLY

Abnormal thyroid function is associated with disability risk, but not with increased risk of death, in individuals 85 years of age or older

BACKGROUND

It is clear that patients with overt hypothyroidism and hyperthyroidism (abnormal TSH and abnormal T\textsubscript{4} levels) are at increased risk of heart problems. It is less clear that subclinical hypothyroidism and hyperthyroidism (abnormal TSH and normal T\textsubscript{4} levels). In some studies, abnormal thyroid function has been associated with an increased risk of death related to heart problems.

Adults in their 80s or older are more likely to have abnormal thyroid function, especially higher TSH values, than younger adults. Heart problems are also more common in elderly patients. However, it is unclear whether abnormal thyroid function is associated with increased risk of heart problems and death in these oldest individuals. The objective of this study was to determine whether abnormal thyroid function is associated with disability and death in a group of 85-year-olds.

THE FULL ARTICLE TITLE


SUMMARY OF THE STUDY

This was a prospective study that used data from the Newcastle 85+ study. Participants in the study were all born in 1921 and recruited at the age of 85 in 2006-2007. A fasting blood draw, physical exam and health questionnaires were conducted at baseline. Disability scores were based on assessments of daily living at baseline, 18, 36 and 60 months. Causes of death were obtained from the national registration system.

A total of 643 individuals participated in the study. Of these, 83% had normal thyroid function tests, 12.5% had subclinical hypothyroidism, 0.9% had overt hypothyroidism, 2.9% had subclinical hyperthyroidism and 0.8% had overt hyperthyroidism. Lower TSH levels were associated with greater degrees of disability in both men and women, but there was no association between thyroid status and risk for death in this group of individuals aged 85 years or older.

WHAT ARE THE IMPLICATIONS OF THIS STUDY?

This study provides reassurance that abnormal thyroid function was not associated with an increased risk for death in elderly patients. Moreover, the lower rates of disability associated with higher TSH levels seen in this study adds to the growing evidence that it may be inappropriate to treat mild TSH elevations in very elderly patients.

— Maria Papaleontiou, MD

ATA THYROID BROCHURE LINKS

Thyroid Disease in the Older Patient: [http://www.thyroid.org/thyroid-disease-older-patient/](http://www.thyroid.org/thyroid-disease-older-patient/)
Overt Hypothyroidism: clear hypothyroidism with an increased TSH and a decreased T\textsubscript{4} level. All patients with overt hypothyroidism are usually treated with thyroid hormone pills.

Overt Hyperthyroidism: clear hyperthyroidism with a decreased TSH and an increased T\textsubscript{4} level and/or T\textsubscript{3} level.