

Mild Thyroid Dysfunction Is Not Associated with Anxiety, Depression, or Cognition in the Elderly

Summaries for Patients are a service provided by *Annals* to help patients better understand the complicated and often mystifying language of modern medicine.

The full report is titled “Is Subclinical Thyroid Dysfunction in the Elderly Associated with Depression or Cognitive Dysfunction?” It is in the 17 October 2006 issue of *Annals of Internal Medicine* (volume 145, pages 573-581). The authors are L.M. Roberts, H. Pattison, A. Roalfe, J. Franklyn, S. Wilson, F.D.R. Hobbs, and J.V. Parle.

What is the problem and what is known about it so far?

The thyroid is a gland in the neck that produces hormones that help to regulate how the body uses energy. Hyperthyroidism is a disease in which the thyroid makes too much thyroid hormone, speeding up many of the body’s functions. Symptoms of hyperthyroidism include rapid heartbeat, feeling hot, anxiety, muscle weakness, frequent bowel movements, trouble sleeping, shakiness, light or missed menstrual periods, and weight loss. Hypothyroidism is a condition in which the thyroid makes too little thyroid hormone and body functions slow down. Symptoms of hypothyroidism include tiredness, feeling cold, constipation, hoarse voice, changes in hair and skin, heavy menstrual periods, and weight gain. Doctors diagnose thyroid disease by checking blood levels of thyroid hormones. Thyroid disease can usually be easily treated with drugs; radiation; or, occasionally, surgery.

Thyroid disease is very common. Not all patients develop symptoms, especially early in the course of the disease. Subclinical thyroid dysfunction is a term that doctors use to describe people who have very mildly abnormal levels of some thyroid hormones but no symptoms. Doctors disagree about the need to treat subclinical thyroid disease. Some doctors think that treatment is helpful to patients, and others think that treatment should wait until symptoms develop. One of the arguments for treating it is a concern that it is associated with anxiety, depression, and problems with memory and thinking.

Why did the researchers do this particular study?

To find out whether people with subclinical thyroid dysfunction are more likely to have depression, anxiety, and problems with memory or thinking than people with normal thyroid function.

Who was studied?

5865 patients 65 years of age or older who had no known thyroid disease and received care from primary care doctors in central England.

How was the study done?

The researchers did blood tests on all of the patients to measure thyroid function. All patients completed standard questionnaires to evaluate anxiety, depression, and memory or thinking. The researchers then compared the frequency of anxiety, depression, and memory or thinking problems in people with and without subclinical thyroid disease while accounting for other illnesses and medications that the people were taking at the time that might also lead to these problems. Failure to account for other illnesses and medications has been an important problem with previous studies of this topic.

What did the researchers find?

The researchers found no association between subclinical thyroid disease and anxiety, depression, or problems with memory or thinking.

What were the limitations of the study?

The patients in this study may not be representative of elderly people everywhere.

What are the implications of the study?

Although there may be other reasons to screen for subclinical thyroid disease, doctors should not screen elderly patients for this disorder because of concern that it could be related to anxiety, depression, or problems with memory or thinking.

Summaries for Patients are presented for informational purposes only. These summaries are not a substitute for advice from your own medical provider. If you have questions about this material, or need medical advice about your own health or situation, please contact your physician. The summaries may be reproduced for not-for-profit educational purposes only. Any other uses must be approved by the American College of Physicians.