



SUBCLINICAL THYROID DISEASE

Subclinical thyroid disease is not associated with altered sleep quality in older men

BACKGROUND

Overt thyroid disease indicates that both the TSH and the T_4 levels are abnormal. Subclinical thyroid disease indicates that only the TSH is abnormal – T_4 and T_3 levels are normal. While overt thyroid disease has clear cut adverse effects on health and requires treatment, the effect of subclinical thyroid disease on health is much less clear. Multiple studies have been done to try to determine if subclinical thyroid disease has a significant negative impact on health and quality of life. Sleep disturbances are common, especially in the elderly. The present study was done to see if subclinical thyroid disease impacts sleep quality in older men.

THE FULL ARTICLE TITLE

Akatsu H et al. Association between thyroid function and objective and subjective sleep quality in older men: the Osteoporotic Fractures in Men (MrOs) study. *Endocr Pract.* January 21, 2014;1-34 [Epub ahead of print].

SUMMARY OF THE STUDY

A total of 682 men 65 years and older were included in this study. Each participant had thyroid function studies and an assessment of sleep quality. Anyone taking thyroid hormone replacement or with abnormal levels of free T_4 was excluded from the study. For study purposes, subclinical hyperthyroidism was defined as a serum TSH less than 0.55 mIU/L and subclinical hypothyroidism

as a serum TSH greater than 4.78 mIU/L. A total of 38 subjects (6%) had subclinical hypothyroidism and 15 (2%) had subclinical hyperthyroidism. Individuals with subclinical hypothyroidism had a slightly shorter, mean duration of waking after initially getting to sleep. There were no other differences in sleep quality. Subjects with subclinical hyperthyroidism reported sleeping 44 fewer minutes per night than euthyroid men. It was concluded that subclinical thyroid disease was not associated with any significant alterations in sleep quality in older men.

WHAT ARE THE IMPLICATIONS OF THIS STUDY?

The present study provides data that sleep quality is not significantly worsened in those with mild thyroid dysfunction in older men. This is important due to the high frequency of sleep disorders in the elderly. Thus, abnormal sleep is not a reason to consider treating subclinical thyroid disease.

— Frank Crantz, MD

ATA BROCHURE LINKS

Hypothyroidism: <http://www.thyroid.org/what-is-hypothyroidism>

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ABBREVIATIONS & DEFINITIONS

Overt Hypothyroidism: clear hypothyroidism an increased TSH and a decreased T_4 level. All patients with overt hypothyroidism are usually treated with thyroid hormone pills.

Overt Hyperthyroidism: a condition where the thyroid gland is overactive and produces too much thyroid hormone. Hyperthyroidism may be treated with antithyroid meds (Methimazole, Propylthiouracil), radioactive iodine or surgery.

Subclinical Hypothyroidism: a mild form of hypothyroidism where the only abnormal hormone level is an increased TSH. There is controversy as to whether this should be treated or not.

Subclinical Hyperthyroidism: a mild form of hyperthyroidism where the only abnormal hormone level is a decreased TSH.



SUBCLINICAL THYROID DISEASE, continued

TSH: thyroid stimulating hormone – produced by the pituitary gland that regulates thyroid function; also the best screening test to determine if the thyroid is functioning normally.

Thyroxine (T_4): the major hormone produced by the thyroid gland. T_4 gets converted to the active hormone T_3 in various tissues in the body.

Euthyroid: a condition where the thyroid gland is working normally and producing normal levels of thyroid hormone.

Thyroid Awareness Monthly Campaigns Announced in Cooperation with PuraVida

The ATA will be highlighting a distinct thyroid disorder each month and a portion of the sales for PuraVida bracelets will be donated to the ATA. The month of May is **International Thyroid Awareness Month** and a bracelet is available through the **ATA Marketplace** to support thyroid cancer awareness and education related to thyroid disease.

