



THYROID CANCER

Is obesity a risk factor for thyroid cancer?

BACKGROUND

Thyroid cancer is common and appears to be increasing in incidence, especially among women. A number of reasons for this have been raised, including increased detection of nodules due to the more frequent use of neck imaging studies like CT and MRI scans that include the neck. Obesity has also increased over time and currently there is worldwide concern regarding the high prevalence of obesity and its associated medical conditions. Additionally, obesity has been associated with increased risk of a number of different cancers. These authors sought to determine whether obesity was associated specifically with an increased risk of thyroid cancer.

THE FULL ARTICLE TITLE

Han JM et al. Obesity is a risk factor for thyroid cancer in a large, ultrasonographically screened population. *Eur. J. Endocrinol.* 2013. 168:879-886.

SUMMARY OF THE STUDY

This was a very large study of 15,068 individuals (8491 men and 6577 women) who participated in a voluntary health screening study in Seoul, Korea from January 2007 through December 2008. All individuals received a thyroid ultrasound and thyroid fine needle aspiration biopsy of any discovered thyroid nodules as per a defined protocol. A variety of measurements including height and weight, for calculation of the body mass index (BMI), were obtained. A total of 1427 nodules were biopsied which led to the finding of thyroid cancer in 267 individuals. Most of the thyroid cancers were papillary thyroid cancers (98.5%) and most were less

than 1 cm in size (76%). These investigators found an association between increasing BMI and increased risk of thyroid cancer in women. Women with thyroid cancer were more likely to be obese than women without thyroid cancer in this study. This relationship between obesity and risk of thyroid cancer was not observed in the men in this study.

WHAT ARE THE IMPLICATIONS OF THIS STUDY?

Obesity appears to be a risk factor for thyroid cancer in women. Future studies are needed to clarify the nature of this association and identify the potential biological mechanisms involved. This study importantly identified a potentially modifiable risk factor for thyroid cancer, namely obesity.

— Whitney Woodmansee, MD

ATA THYROID BROCHURE LINKS

Thyroid cancer: http://thyroid.org/patients/patient_brochures/cancer_of_thyroid.html

ABBREVIATIONS & DEFINITIONS

Body mass index (BMI) — Calculated as body weight in kilograms divided by height in meters squared. A person with a BMI greater than or equal to 25 is considered overweight and a person with a BMI greater than or equal to 30 is considered obese.