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THYROID CANCER

Papillary thyroid cancer may be more common in patients with systemic lupus erythematosus

WHAT IS THE STUDY ABOUT?

Systemic lupus erythematosus (SLE) is an uncommon autoimmune connective-tissue disorder which can affect a number of body systems and can lead to arthritis, skin lesions, kidney disease, and other less-common problems. A previous study that looked at a large group of patients with SLE found a high incidence of several cancers, including thyroid cancer. The present study looks at this further and examines the features of thyroid cancer in patients with SLE.

THE FULL ARTICLE TITLE:

Antonelli et al. Thyroid cancer in systemic lupus erythematosus: a case-control study. J Clin Endocrinol Metab 2010;95:314-8.

WHAT WAS THE AIM OF THE STUDY?

The aim of the study was to examine examines the features of thyroid cancer in patients with SLE.

WHO WAS STUDIED?

The study group included 153 patients with SLE who were seen in the Department of Internal Medicine at the University of Pisa from 1995 through 2007.

HOW WAS THE STUDY DONE?

The patient's records were examined as to a diagnosis of thyroid nodules and papillary thyroid cancer. Since the intake of iodine varies significantly in different areas of Italy and since iodine intake influences the likelihood of thyroid abnormalities, study patients from an iodine-deficient area were compared to a control group from an iodine-deficient area and patients from iodine-sufficient area compared to a control group from an iodine-sufficient area.

WHAT WERE THE RESULTS OF THE STUDY?

Thyroid nodules were found in 25% of SLE patients, 27% of patients without SLE living in iodine deficient areas and 13% in patients without SLE living in iodine-sufficient regions. Papillary thyroid cancer was found in 3.2% of patients with SLE, 1% of patients without SLE living in iodine sufficient areas and 0% in patients without SLE living in iodine-deficient regions. Interestingly, 80% of the SLE patients with papillary cancer also had positive TPO antibodies while only 31% of SLE patients without papillary thyroid cancer had positive TPO antibodies.

HOW DOES THIS COMPARE WITH OTHER STUDIES?

Another study showed an increased risk for cancer, including papillary thyroid cancer, in a large group of patients with SLE.

WHAT ARE THE IMPLICATIONS OF THIS STUDY?

There appears to be an increased risk of papillary thyroid cancer in patients with SLE, especially those with positive TPO antibodies. These patients should have a careful clinical examination of the thyroid as part of any physical examination.

— Frank Cranz, MD

ATA THYROID BROCHURE LINKS

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

Thyroid Nodules: http://thyroid.org/patients/patient_brochures/nodules.html

ABBREVIATIONS & DEFINITIONS

Systemic lupus erythematosus (SLE) — an uncommon autoimmune connective-tissue disorder which can affect a number of body systems and can lead to arthritis, skin lesions, kidney disease, and other less-common manifestations.

Thyroid nodule — an abnormal growth of thyroid cells that forms a lump within the thyroid. While most thyroid nodules are non-cancerous (Benign), ~5% are cancerous.

TPO antibodies — these are antibodies that attack the thyroid instead of bacteria and viruses, they are a marker for autoimmune thyroid disease, which is the main underlying cause for hypothyroidism and hyperthyroidism in the United States.