



THYROID CANCER

Thyroid cancer is more common in reproductive age women but is not clinically more aggressive

BACKGROUND

Thyroid cancer is the second most common cancer discovered both during pregnancy and within the first year after delivery. Whether pregnancy has an untoward effect on the thyroid gland making thyroid cancers more prevalent or more aggressive is not well known. The authors compared thyroid cancers diagnosed during pregnancy to those cancers diagnosed in non-pregnant women of similar ages. To do that, they used gene profiling and molecular markers, techniques previously used to classify thyroid cancer types and to differentiate cancerous thyroid nodules from their benign counterparts.

THE FULL ARTICLE TITLE

Lee JC et al. Papillary thyroid carcinoma in pregnancy: a variant of the disease? *Ann Surg Oncol*. August 9, 2012 [Epub ahead of print].

SUMMARY OF THE STUDY

The study included 2 groups of patients: Group 1 included 24 women who were diagnosed with thyroid cancer either during pregnancy or within the first year after delivery; Group 2 included 30 women of the same age as Group 1 but who were not pregnant at time of thyroid cancer discovery. The cancer characteristics and gene profiles/molecular markers were compared.

Cancers from the pregnancy group (group 1) were larger and showed more spread to the lymph nodes in the neck than those in group 2. However, the authors did not show reproducible differences in their molecular markers, suggesting similar cancer activity. None of the patients died from thyroid cancer and the risk of cancer recurrence was also similar in both groups.

WHAT ARE THE IMPLICATIONS OF THIS STUDY?

In women, thyroid cancers discovered during or soon after pregnancy are more likely to spread to lymph nodes but have a similar prognosis and similar molecular markers as cancers diagnosed in the non-pregnant state. This study supports the recommendation to delay surgery until after delivery unless the patient presents with aggressive cancer features early in the pregnancy course.

— Mona Sabra, MD

ATA THYROID BROCHURE LINKS

Thyroid cancer: <http://www.thyroid.org/cancer-of-the-thyroid-gland>

Thyroid and Pregnancy: <http://www.thyroid.org/thyroid-disease-and-pregnancy>

ABBREVIATIONS & DEFINITIONS

Genes: a molecular unit of heredity of a living organism. Living beings depend on genes, as they code for all proteins and RNA chains that have functions in a cell. Genes hold the information to build and maintain an organism's cells and pass genetic traits to offspring.

Molecular markers: genes and microRNAs that are expressed in benign or cancerous cells. Molecular markers can be used in thyroid biopsy specimens to either to diagnose cancer or to determine that the nodule is benign.