



THYROID CANCER AND PREGNANCY

Pregnancy may not have an impact on cancer recurrence in women with thyroid cancer

WHAT IS THE STUDY ABOUT?

Thyroid cancer is relatively common and is the fastest rising cancer in women, many of whom are of child bearing age. Thus, it is not unusual for thyroid cancer to be detected during pregnancy or for women who are thyroid cancer survivors to become pregnant. Pregnancy has been associated with enlargement of the thyroid gland and increased growth of thyroid nodules, some of which are cancerous. These observations have led some investigators to suggest that the hormonal changes that occur during pregnancy may be associated with an increased risk of thyroid cancer progression and/or recurrence. This study sought to determine whether women with a history of papillary thyroid cancer who became pregnant after receiving their treatment were at increased risk of thyroid cancer progression or recurrence.

THE FULL ARTICLE TITLE:

Hirsch D et al. Impact of pregnancy on outcome and prognosis of survivors of papillary thyroid cancer. *Thyroid*. 2010; 20(10):1179-1185.

WHAT WAS THE AIM OF THE STUDY?

The aim of the study was to determine whether pregnancy in thyroid cancer survivors was associated with an increased risk of thyroid cancer progression or recurrence.

WHO WAS STUDIED?

A total of 63 women with a history of papillary thyroid cancer that had given birth at least once after receiving thyroid cancer treatment who were followed at the Endocrine Institute of Rabin Medical Center in Israel between 1992 and 2009.

HOW WAS THE STUDY DONE?

The records of 63 were reviewed for: age at cancer diagnosis, stage of papillary thyroid cancer, types of treatment (s) (i.e. surgery, radioactive iodine), thyroglobulin and TSH levels before, during and after pregnancy as well as all structural imaging studies (i.e. ultrasounds, nuclear medicine scans, CT scans). Women were categorized by cancer status before pregnancy (thyroid cancer free or persistent thyroid cancer) and thyroid cancer progression or recurrence (within 1 year of delivery) was assessed.

WHAT WERE THE RESULTS OF THE STUDY?

All women were younger than 45 years at time of the diagnosis of their papillary thyroid cancer and the average age during first pregnancy was ~30 years. The average time from thyroid cancer treatment to first child delivery was ~5 years and the average time of follow up after first delivery was 4.8 years. Thirteen women (20.6%) were considered to have persistent thyroid cancer at the time of pregnancy and 6 of these patients were determined to have thyroid cancer progression during their first pregnancy after thyroid cancer diagnosis. Twenty three women had two or more children after thyroid cancer treatment and 3 demonstrated cancer progression in the second pregnancy, all of whom had persistent cancer before the first pregnancy. Only 1 patient who was cancer free before pregnancy was determined to have a cancer recurrence during pregnancy. The average TSH during pregnancy was 2.65 mIU/L and TSH levels did not correlate with thyroid cancer progression or recurrence.

HOW DOES THIS COMPARE WITH OTHER STUDIES?

This study is consistent with other smaller studies suggesting that pregnancy in women thyroid cancer survivors does not pose an increased risk of thyroid cancer recurrence or progression.

WHAT ARE THE IMPLICATIONS OF THIS STUDY?

Pregnancy after treatment for thyroid cancer does not appear to increase the risk of disease recurrence. Further this suggests that TSH values do not have to remain suppressed during pregnancy in thyroid cancer survivors. These studies provide reassurance to women with a history of thyroid cancer who are contemplating pregnancy.

— Whitney Woodmansee, MD

ATA THYROID BROCHURE LINKS

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

Thyroid and Pregnancy: http://thyroid.org/patients/patient_brochures/pregnancy.html

continued on next page





THYROID CANCER AND PREGNANCY, continued

ABBREVIATIONS & DEFINITIONS

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.

Papillary thyroid cancer — the most common type of thyroid cancer.

Thyroglobulin — a protein made only by thyroid cells, both normal and cancerous. When all normal thyroid tissue is destroyed after radioactive iodine therapy in patients with thyroid cancer, thyroglobulin can be used as a thyroid cancer marker in patients that do not have thyroglobulin antibodies.

 <p>AMERICAN THYROID ASSOCIATION FOUNDED 1923</p>	 <p><i>Friends of the ATA</i> Founded 2005</p>
<p>Become a Friend of the ATA! Subscribe to Friends of the ATA e-news >> Get the latest thyroid health information. You'll be among the first to know the latest cutting-edge thyroid research that is important to you and your family.</p>	