



THYROID CANCER

Thyroid Cancer seems to be similar in children and young adults

WHAT IS THE STUDY ABOUT?

Thyroid cancer is relatively rare in children, but there are still a substantial number of children who are diagnosed with papillary thyroid cancer. A cancer registry of cases nationwide, the Surveillance, Epidemiology and End Results (SEER), recently reported that almost 8% of all cancers in teenagers were thyroid cancer. Some studies have suggested that children often have more extensive disease as compared to adults. Despite this, most children have a good prognosis and usually have a long life expectancy that is minimally affected by the thyroid cancer. This study examined thyroid cancer in children and young adults in order to determine any differences in these two age groups in the growth pattern and metastatic behavior of papillary thyroid cancer.

THE FULL ARTICLE TITLE:

Machens et al, Papillary Thyroid cancer in children and adolescents does not differ in growth pattern and metastatic behavior. *J Pediatr* 2010. S0022-3476(10)00326-4 [pii];10.1016/j.jpeds.2010.04.026 [doi].

WHAT WAS THE AIM OF THE STUDY?

The goal of the study was to examine thyroid cancer in children and young adults in order to determine any differences in these two age groups.

WHO WAS STUDIED?

The study group included 83 patients under the age of 18 who were operated and treated at the Martin Luther Hospital in Halle, Germany. The group was divided into ages 6-11, 12-15 and 16-18 years old.

HOW WAS THE STUDY DONE?

The patients medical records were reviewed and their clinical status was recorded and summarized in this report. Patients all underwent total thyroidectomy and 96% also had removal of lymph nodes. Patients were treated with radioactive iodine as required.

WHAT WERE THE RESULTS OF THE STUDY?

There was no difference in the spread of the thyroid cancer to the lymph nodes in any age group; indeed most patients in all age groups had spread of the thyroid cancer to the lymph nodes. The larger cancers had increased extrathyroidal growth, but there was no difference between the age groups in the growth pattern of the thyroid cancer.

HOW DOES THIS COMPARE WITH OTHER STUDIES?

Several other studies have shown that children have more advanced thyroid cancer at their initial diagnosis than adults. The study confirms that most of the patients had spread of the cancer to the lymph nodes. Despite the more extensive disease, children have the lowest mortality rate for thyroid cancer according to the SEER database.

WHAT ARE THE IMPLICATIONS OF THIS STUDY?

This study shows that children frequently have extensive thyroid cancer but there does not appear to be any difference in the extent of the cancer between younger children and adolescents. Despite the more extensive disease, few children diagnosed with thyroid cancer will eventually die of the disease.

— Henry Fein, MD

ATA THYROID BROCHURE LINKS

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

Thyroid Surgery: http://thyroid.org/patients/patient_brochures/surgery.htm

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THYROID CANCER, continued

ABBREVIATIONS & DEFINITIONS:

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

Thyroidectomy — surgery to remove the entire thyroid gland. When the entire thyroid is removed it is termed a total thyroidectomy. When less is removed, such as in removal of a lobe, it is termed a partial thyroidectomy.

Total Thyroidectomy — surgery to remove the entire thyroid gland.

Radioactive Iodine (RAI) — this plays a valuable role in diagnosing and treating thyroid problems since

it is taken up only by the thyroid gland. I-131 is the destructive form used to destroy thyroid tissue in the treatment of thyroid cancer and with an overactive thyroid. I-123 is the non-destructive form that does not damage the thyroid and is used in scans to take pictures of the thyroid (Thyroid Scan) or to take pictures of the whole body to look for thyroid cancer (Whole Body Scan).

SEER — Surveillance, Epidemiology and End Results program, a nation-wide anonymous cancer registry generated by the National Cancer Institute that contains information on 26% of the United States population. Website: <http://seer.cancer.gov/>