CLINICAL THYROIDOLOGY FOR PATIENTS

A publication of the American Thyroid Association

THYROID CANCER

Are Hürthle-cell thyroid cancers really a more aggressive form of thyroid cancer?

BACKGROUND

Thyroid cancer is the fastest rising cancer in women. Papillary cancer is the most common typed, followed by follicular cancer. Hürthle-cell cancer (HCC) is a variant of follicular thyroid cancer and is rare, representing 3-7% of all thyroid cancer. It has been noted that HCC tends to be more aggressive, is more likely to spread to local lymph nodes or other distant organs and to recur. HCC is overall less responsive to radioactive iodine therapy compared to other types of thyroid cancer. Only small studies of patients with HCC have been conducted in the last several years. The goal of this study is to compare the characteristics and evolution of patients with HCC included in the Surveillance, Epidemiology, and End Results (SEER) database and to also evaluate prognostic factors in HCC patients. The study analyzed data from 18 patient registries in the US that represent the general US population.

THE FULL ARTICLE TITLE

Goffredo Pet al. Hurthle cell carcinoma. Cancer. July 11, 2012 [Epub ahead of print]. doi: 10.1002/cncr.27770.

SUMMARY OF THE STUDY

The study evaluated 3311 patients with HCC and 59,585 patients with other types of thyroid cancer enrolled in the SEER database between 1988 to 2009. HCC was more frequent in men and older patients than other types of thyroid cancer. Patients with HCC presented with more advanced disease with regard to cancer size, local/regional extension and distant metastases than patients with other types of thyroid cancer.

The overall survival rate during the follow up period was 82.1% for patients with HCC and 89.2% for patients with other types of thyroid cancer. Disease-specific survival of patients with HCC has not changed over the past 2 decades while survival for patients with other types of thyroid cancer has improved. Disease-specific death occurred in 5.9% of patients with HCC and in 2.7% of patients with other types of thyroid cancer. Poor prognosis for HCC was strongly associated with not having thyroid surgery and the presence of distant metastatic disease. Improved survival from HCC was associated with small cancers confined to the thyroid without local or distant metastases and administration of postoperative radioactive iodine treatment.

WHAT ARE THE IMPLICATIONS OF THIS STUDY?

This population study based on the SEER database is the largest and most updated study of patients with HCC and confirms that HCC presents with more advanced disease and has a shorter survival as compared with other types of thyroid cancer. Therefore, HCC should be treated aggressively with the expectation of a worse prognosis than other types of thyroid cancer.

— Alina Gavrila, MD

ATA THYROID BROCHURE LINKS

Thyroid cancer: <u>http://www.thyroid.org/</u> <u>cancer-of-the-thyroid-gland</u> Radioactive Iodine Therapy: <u>http://www.thyroid.org/</u> radioactive-iodine

Thyroid Surgery: <u>http://thyroid.org/patients/patient</u> <u>brochures/surgery.html</u>

ABBREVIATIONS & DEFINITIONS

Papillary thyroid cancer (PTC): the most common type of thyroid cancer.

Follicular thyroid cancer (FTC): the second most common type of thyroid cancer.

Lymph node: bean-shaped organ that plays a role in removing what the body considers harmful, such as infections and cancer cells. 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/

Cancer metastasis: spread of the cancer from the initial organ where it developed to other organs, such as the lungs and bone.

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Volume 5 • Issue 12 • 2012 • 9



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THYROID CANCER, continued

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-I3I is the destructive form used to destroy thyroid tissue in the treatment of thyroid cancer and with an overactive thyroid. I-I23 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).

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.

