CLINICAL THYROIDOLOGY **FOR PATIENTS**

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THYROID CANCER

Medullary thyroid microcarcinomas have significant rates of poor prognostic features and require appropriate surgical management

BACKGROUND

Medullary thyroid cancer is a rare type of thyroid cancer. Only 5% of patients with thyroid cancer will have medullary thyroid cancer. It is different from other forms of thyroid cancer in that surgery is the main treatment – radioactive iodine is not indicated. Microcarcinoma is any cancer that is less than 1cm. A small number of patients with medullary thyroid cancer (<1%) will have micromedullary cancer. There is an ongoing debate regarding the prognosis of micromedullary cancer and consequently the need for aggressive surgery for these patients. In this study, the authors attempted to define the clinical characteristics of micromedullary cancer and the prognosis of this diagnosis, especially compared to the usual medullary cancer.

THE FULL ARTICLE TITLE:

Kazaure HS et al. Medullary thyroid microcarcinoma: a population-level analysis of 310 patients. Cancer. June 29, 2011 [Epub ahead of print]. doi: 10.1002/cncr.26283.

SUMMARY OF THE STUDY

A total of 310 patients with micromedullary cancer were selected from the SEER database. Most patients were adults (92%). The cancers were mostly confined to the thyroid (92%) and only 1/3 of patients had more than one cancer focus in the resected gland. Total thyroidectomy was the preferred surgical procedure (89%) and a little over half of the patients also had lymph node dissection, with 37% of the sampled lymph nodes positive for metastatic cancer. Risk of lymph node metastasis increased with cancer size and presence of cancer invasion into surrounding tissues. More than 5% of the patients with micromedullary cancer had distant metastasis (cancer in lungs, bone, etc.) at time of thyroid cancer diagnosis. The 10 year death rate from micromedullary cancer was 4% if the cancer was confined to the thyroid, 13% if the cancer extended into surrounding tissues or lymph nodes and 50% if distant metastasis was detected at time of thyroid cancer diagnosis.

WHAT ARE THE IMPLICATIONS OF THIS STUDY?

Patients with micromedullary cancer are at increased risk for lymph node spread and death from thyroid cancer. Aggressive surgical intervention is thus needed and should not be modified due to the small size of the primary cancer.

— Mona Sabra, MD

ATA THYROID BROCHURE LINKS

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

ABBREVIATIONS & DEFINITIONS

Medullary thyroid cancer: a relatively rare type of thyroid cancer that often runs in families. Medullary cancer arises from the C-cells in the thyroid.

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.

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/

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