



## THYROID CANCER

### Elderly Patients With Thyroid Cancer Have Higher Mortality Rates If Not Treated With Surgery And Radioactive Iodine

#### WHAT IS THE STUDY ABOUT?

Thyroid cancer is common in elderly patients, who often have more aggressive disease. Surgery with a total thyroidectomy and radioactive iodine (RAI) is the usual course of therapy in patients with extensive thyroid cancer. Elderly patients frequently have other chronic diseases as well, which makes thyroid surgery more difficult. As a result, they may have more surgical complications and may not be able to tolerate radioiodine or radiation therapy which is sometimes needed after surgery. The aim of this study was to determine how total thyroidectomy and RAI affect the outcome in elderly patients with thyroid cancer.

#### THE FULL ARTICLE TITLE:

Park et al. Treatment patterns of aging Americans with differentiated thyroid cancer. *Cancer* 2009.

#### WHAT WAS THE AIM OF THE STUDY?

The aim of this study was to determine how total thyroidectomy and RAI affect the outcome in elderly patients with thyroid cancer.

#### WHO WAS STUDIED?

Among patients with thyroid cancer registered in the SEER database between 1988 and 2003, 8899 patients older than 45 years of age with complete clinical records were selected for this study.

#### HOW WAS THE STUDY DONE?

Patients were divided into 3 age groups: 45-64 (69%), 65-79 (26%) and >80 (5%) years of age. The records of patients were reviewed as to the patient age, cancer extension, spread to lymph nodes and treatment.

#### WHAT WERE THE RESULTS OF THE STUDY?

Patients >65 years of age had larger cancer size and more extensive disease as compared to younger patients. While almost all patients had surgery, the number of elderly patients (>80 years) who received total thyroidectomy (95%) was lower than younger patients (99%). About 50% of younger patients also received RAI therapy while only 34% of elderly patients were treated with RAI. Elderly patients who did not have a total thyroidectomy had 4-

fold greater risk of dying as compared to those who had surgery. In all age groups, RAI decreased the risk of dying as compared to those who received these treatments.

#### HOW DOES THIS COMPARE WITH OTHER STUDIES?

The data in this study, as well as some previous reports, show that elderly patients with thyroid cancer have more extensive disease but receive less aggressive treatment as compared to younger patients. A study by Matsuyama et al reviewed in the October 2009 issue of *Clinical Thyroidology for Patient* showed that surgery for thyroid cancer improves the survival and the quality of life of elderly patients and should not be avoided if they are well enough to tolerate the operation (Castro "Surgery for thyroid cancer increases the survival rate and enhances the quality of life of elderly patients providing they are well enough to tolerate surgery." *Clinical Thyroidology for Patients* [serial online]. 2009;2(6):10-11. Available at: [http://thyroid.org/patients/ct/volume2/issue6/ct\\_patients\\_v26\\_10\\_11.html](http://thyroid.org/patients/ct/volume2/issue6/ct_patients_v26_10_11.html)).

#### WHAT ARE THE IMPLICATIONS OF THIS STUDY?

Although total thyroidectomy and RAI improves the outcome in patients with extensive thyroid cancer, elderly patients often receive less aggressive therapy as compared to younger patients. A careful selection of treatment and consultation with the patient is needed before making a decision to limit aggressive therapy for elderly patients with thyroid cancer.

— Jamshid Farahati, MD

#### ATA THYROID BROCHURE LINKS

Thyroid cancer: [http://thyroid.org/patients/patient\\_brochures/cancer\\_of\\_thyroid.html](http://thyroid.org/patients/patient_brochures/cancer_of_thyroid.html)

Radioactive Iodine Therapy: [http://thyroid.org/patients/patient\\_brochures/radioactive.html](http://thyroid.org/patients/patient_brochures/radioactive.html)

Thyroid Surgery: [http://thyroid.org/patients/patient\\_brochures/surgery.html](http://thyroid.org/patients/patient_brochures/surgery.html)

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## **THYROID CANCER**, continued

### **ABBREVIATIONS & DEFINITIONS**

**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.

**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/>

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