THYROID CANCER

Life expectancy in thyroid cancer patients is reduced when age at initial treatment is greater than 45

BACKGROUND

The current staging system for thyroid cancer from stage 1-4 is used to guide recommendations for additional treatment after surgery, such as radioactive iodine therapy, and to determine prognosis. The staging system uses cancer size, presence of cancer extension beyond the thyroid gland into surrounding neck structures, spread of the cancer to the lymph nodes in the neck and spread of the cancer to other parts of the body. The staging system also adjusts prognosis by age, either younger or older than the age of 45. This study was done to examine role of age in determining prognosis in a large group of thyroid cancer patients.

SUMMARY OF THE STUDY

The Wurzburg, Germany thyroid cancer database was begun in 1980. A total of 2011 patients with thyroid cancer had been treated between 1980 - 2011. Most patients had surgery and radioiodine therapy. Patient follow-up included ultrasound, radioactive iodine scans and blood tests for thyroglobulin. Additional therapy was based on evidence of recurrent cancer. Patients were followed for an average of 7.1 years. A total of 14% of the patients had a decreased life expectancy. All of these patients presented with spread of their cancer beyond the neck (stage 4) and were > 45 at the time of initial treatment. All of the other patients >45 had a normal life expectancy as did those patients <45 years.

WHAT ARE THE IMPLICATIONS OF THIS STUDY?

This study confirms that most thyroid cancer patients have an excellent prognosis no matter how extensive their cancer. Further, only patients >45 with stage 4 cancer has a decreased life expectancy. This confirms that these patients need to be targeted for more aggressive therapy.

— Jerrold M. Stock, MD

ATA THYROID BROCHURE LINKS

Thyroid cancer: http://www.thyroid.org/cancer-of-the-thyroid-gland
Radioactive Iodine Therapy: http://www.thyroid.org/radioactive-iodine
Thyroid Surgery: http://thyroid.org/patients/patient_brochures/surgery.html

ABBREVIATIONS & DEFINITION

Thyroid Ultrasound: a common imaging test used to evaluate the structure of the thyroid gland. Ultrasound uses soundwaves to create a picture of the structure of the thyroid gland and accurately identify and characterize nodules within the thyroid. Ultrasound is also frequently used to guide the needle into a nodule during a thyroid nodule biopsy.

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

Follicular thyroid cancer: the second 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.

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).
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.