THYROID CANCER

Active surveillance for low risk papillary thyroid cancer can be considered in select patients

BACKGROUND
The number of new thyroid cancer cases has increased over recent years, especially the number of small, low-risk papillary thyroid cancers. It is clear now that treating these small cancers aggressively with surgery results in more potential harm to patients than if the small cancer was simply watched. Because of this, simply watching, known as active surveillance, became a promising alternative to surgery for these low-risk cancers in select patients. Active surveillance involves closely monitoring the thyroid cancer over time, instead of treating it with immediate surgery. Prior studies have shown that active surveillance is safe in papillary thyroid cancers measuring 1 cm or smaller and confined to the thyroid without any lymph node involvement or spread outside of the neck. However, little is known about outcomes of active surveillance for patients with larger cancers measuring 1-2 cm and confined to the thyroid. This study compared outcomes of active surveillance for these patients to this with cancers <1 cm. The authors also examined outcomes of patients who had surgery for these small cancers.

THE FULL ARTICLE TITLE

SUMMARY OF THE STUDY
The study included patients who were followed at the Cancer Institute Hospital in Tokyo, Japan, since 1995. Among 406 patients with papillary thyroid cancer < 1 cm, 360 (89%) underwent active surveillance and 46 (11%) underwent surgery. Among 392 patients with papillary thyroid cancer 1-2 cm, 331 (84%) underwent active surveillance and 61 (16%) underwent surgery. The patients in the active surveillance program were followed with physical exam, neck ultrasound and chest X-rays every 6 to 12 months after diagnosis. These patients were evaluated for increase in cancer size, development of spread to the lymph nodes and spread to other parts of the body. The follow-up was 7.3 - 7.9 years. If progression of the cancer was seen or the patient changed their mind, surgery was performed.

The authors found that the 5- and 10-year rates of progression were similar in patients with papillary thyroid cancer < 1 cm compared with those with 1-2 cm cancers during active surveillance. A total of 11 patients with 1-2 cm cancers had surgery after active surveillance and none had the cancer come back. Of the patients with 1-2 cm cancers who had immediate surgery, 8 had the cancer come back. The rate of cancer coming back was significantly higher for cancers ≥1.5 cm than <1.5 cm in this group.

WHAT ARE THE IMPLICATIONS OF THIS STUDY?
This study showed that patients with 1-2 cm papillary thyroid cancers had similar progression rates to patients with <1 cm cancers during active surveillance. Additionally, delayed surgery was not associated with any harm in these patients. These findings are important as they show that active surveillance of small thyroid cancers, especially those <15 mm in size, is safe. Expanding active surveillance to larger cancers would decrease the number of thyroid surgeries and subsequent complications. However, more research is still needed to determine exactly which thyroid cancer patients are ideal for active surveillance, considering age, other health issues and the expertise of treatment team.

— Maria Papaleontiou, MD

ATA THYROID BROCHURE LINKS
Thyroid Cancer (Papillary and Follicular): https://www.thyroid.org/thyroid-cancer/
Thyroid Surgery: https://www.thyroid.org/thyroid-surgery/
**ABBREVIATIONS & DEFINITIONS**

**Papillary thyroid cancer:** The most common type of thyroid cancer. There are 4 variants of papillary thyroid cancer: classic, follicular, tall-cell and noninvasive follicular thyroid neoplasm with papillary-like nuclear features (NIFTP).

**Active surveillance:** Involves closely monitoring the thyroid cancer over time, instead of treating it with immediate surgery.

**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.

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

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