AMERICAN THYROID ASSOCIATION
Optimal Thyroid Health for All

Volume 14 | Issue 3 | March 2021

Clinical Thyroidology® for the Public

THYROID CANCER

Thyroid cancer in solid organ transplant recipients

BACKGROUND

As more patients are receiving organ transplants, it is important to understand the existence and risks of thyroid cancer in this patient population. The diagnosis of thyroid cancer has been shown to increase after transplantation, but the overall prognosis appears similar to that in the general population. Traditionally, patients with thyroid cancer diagnosed during screening before transplantation have waited up to 2 years after diagnosis before proceeding with transplantation. However, no clear data exist on the outcome of patients with a history of thyroid cancer who undergo subsequent solid organ transplantation. With expanding indications for transplantation, this variable waiting period between thyroid cancer diagnosis and transplantation has come into question. This study was performed to characterize the prognosis, recurrence, and survival of patients with thyroid cancer undergoing solid organ transplantation and to determine the risk and prognosis of thyroid cancer in transplant patients.

THE FULL ARTICLE TITLE

Webb C et al 2020 Is thyroid cancer prognosis affected by solid organ transplantation? Surgery. Epub 2020 Aug 16. PMID: 32814633.

SUMMARY OF THE STUDY

This study looked at patients who were undergoing solid organ transplantation at the Mayo Clinic in Phoenix, Arizona. It was based on a review of the medical charts. A detailed analysis was done to look at the prevalence of thyroid cancer in these patients before and after receiving the transplants. Risk of recurrence was also studied. Approximately 13,000 chart reviews were conducted. The period of study was between the years 2000 to 2018 (18 years).

The results showed that even though the diagnosis of thyroid cancer can be made both before and after transplantation, the outcomes were quite similar in terms of recurrence and survival. The most common thyroid cancer in transplant patients was papillary thyroid cancer, as is seen in patients in the general population. For patients that were diagnosed before transplantation, there were no recurrences after the transplantation. The incidence of papillary thyroid cancer after a solid organ transplantation of the kidney, liver, pancreas, heart, or lung was 0.33%. About 1 in 5 of patients diagnosed with the thyroid cancer after the transplantation were diagnosed within the first year after receiving the transplant.

WHAT ARE THE IMPLICATIONS OF THIS STUDY?

This study shows that may be useful to screen for thyroid cancer in patients undergoing or have had a solid organ transplant. Also, in patients who have not yet received the transplant and were diagnosed with thyroid cancer, proceeding with the transplant after the treatment of thyroid cancer is completed may be feasible. The recurrence rates before and after transplantation are similar. The outcomes of thyroid cancer in these patients is similar to the general population.

—Vibhavasu Sharma, MD, FACE

ATA THYROID BROCHURE LINKS

Thyroid Cancer (Papillary and Follicular): https://www.thyroid.org/thyroid-cancer/

THYROID CANCER, continued

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).

Cancer recurrence: this occurs when the cancer comes back after an initial treatment that was successful in destroying all detectable cancer at some point.