

# Outcomes of Thyroid Nodules Treatment

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## Introduction

Thyroid nodules are a common condition in the head and neck region. Open surgery is the standard treatment for thyroid nodules. A retrospective review of treatment outcomes was conducted at a single institution.

## Methods

A review was conducted on 210 patients with thyroid nodules treated between 2018 and 2023 at Chi Mei Medical Center, Liouying. All patients received either unilateral or bilateral open procedures for thyroidectomy and/or central with lateral neck dissection based on the nature and extent of the disease. The operative procedures were performed using the standard open method with Medtronic intermittent intra-operative neuromonitoring (IONM). The postoperative outcomes, including vocal cord function, calcium and thyroid function levels, hematoma formation, tumor recurrence, and patient survival, were all analyzed.

## Results

We have 147 patients with benign conditions and 63 patients with malignant conditions. Out of 57 cases of papillary carcinoma (90.5%), 47 were females and 10 were males. Among the female patients, 35 were in stage I, 8 in stage II, 1 in stage III, and 3 in stage IV. Among the male patients, 6 were in stage I and 4 in stage II. For the 2 cases of follicular carcinoma, both male and female patients were in stage II. For the 2 cases of anaplastic carcinoma, both male and female patients were in stage IV (Figure 1). Post-surgery, there were 5 temporary complications noted due to recurrent laryngeal nerve palsy—3 in the benign group and 2 in the malignant group. There were 3 cases of permanent recurrent laryngeal nerve palsy—2 in the benign group and 1 in the malignant group. There were 12 cases of temporary hypoparathyroidism—6 in the benign group and 6 in the malignant group. There were 4 cases of permanent hypoparathyroidism—2 in the benign group and 2 in the malignant group. Additionally, there were 2 cases of postoperative hematoma and 5 patients died from advanced carcinoma (Figure 2).

## Conclusions

Thyroid nodules are a prevalent issue within the head and neck region. Open thyroidectomy continues to play a crucial role in the management of thyroid nodules. The complication rate matches that of modern surgery.

**Key words:** Thyroid nodules, Thyroidectomy, Complications

