

ASSESSMENT OF SURGICAL APPROACHES IN THYROIDECTOMY: A RETROSPECTIVE STUDY ON COMPLICATION RATES AND PATIENT SATISFACTION.

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ABSTRACT:

Background: Thyroidectomy is a common surgical procedure performed to treat thyroid disorders, with various surgical approaches available, including open thyroidectomy and minimally invasive techniques such as robotic or endoscopic thyroidectomy. The choice of surgical approach can impact postoperative outcomes, including complication rates and patient satisfaction. This retrospective study aims to assess complication rates and patient satisfaction associated with different surgical approaches in thyroidectomy.

Methods: This retrospective observational study was conducted at Saveetha Medical College and Hospital, involving a sample size of 38 patients who underwent thyroidectomy between specified dates. Data collected included indications for surgery (goiter or tumors), extent of thyroidectomy (partial, subtotal, total), and postoperative outcomes such as complication rates and patient satisfaction, assessed using a 5-point Likert scale.

Results: Thirty-eight patients underwent thyroidectomy, with goiter identified as the primary indication in 33 (86.8%) cases and tumors in 5 (13.2%) cases. The extent of thyroidectomy included partial in 33 (87%), subtotal in 4 (10.5%), and total in 1 (2.6%) patients. The observed complication rate was lower than expected, at 1.1%. Patient satisfaction was high, with 28 patients rating their experience as very satisfied (5 points on the Likert scale), 9 patients satisfied, and 1 patient unsure. There were no reported deaths.

Conclusion: Thyroidectomy procedures performed at Saveetha Medical College and Hospital demonstrated a high level of safety, with a low complication rate and high patient satisfaction (97%). This study underscores the effectiveness and positive outcomes of thyroid surgery, emphasizing the importance of patient-centered care and surgical excellence in achieving favorable postoperative results.

Keywords: Thyroid, goiter, thyroid cancer, thyroidectomy, patient satisfaction, complication

INTRODUCTION

Thyroidectomy, the surgical removal of part or all of the thyroid gland, is a common procedure performed to treat various thyroid disorders, including goiter and thyroid tumors. The choice of surgical approach and extent of thyroidectomy can significantly impact postoperative outcomes, including complication rates and patient satisfaction. Understanding these outcomes is essential for optimizing surgical management and improving patient care in thyroid surgery.

Thyroidectomy may involve different surgical techniques, ranging from traditional open surgery to minimally invasive approaches such as robotic or endoscopic thyroidectomy. Each technique has its advantages and potential drawbacks, influencing factors such as operative time, recovery period, and cosmetic outcomes. Additionally, the extent of thyroidectomy—whether partial, subtotal, or total—varies based on the underlying condition and surgical goals.

This retrospective observational study aims to evaluate the complication rates and patient satisfaction associated with various thyroidectomy procedures performed at Saveetha Medical College and Hospital. By assessing these outcomes, the study seeks to provide insights into the safety, efficacy, and patient-centered outcomes of different surgical approaches in thyroid surgery. Such findings are crucial for guiding clinical decision-making, optimizing surgical techniques, and enhancing overall patient outcomes in thyroidectomy procedures.

MATERIALS AND METHODS

- **STUDY DESIGN-** Retrospective observational study
- **STUDY POPULATION-** Patients who underwent thyroid surgery
- **SAMPLE SIZE-** 38
- **STUDY AREA-** Saveetha medical hospital and college
- **STUDY DURATION-** January to June 2023

INCLUSION CRITERIA

- Adults patients >18 years old who underwent thyroid surgery were included.
- Patients with benign or malignant thyroid conditions undergoing partial or total thyroidectomy.

EXCLUSION CRITERIA

- Pediatric patients
- Patients with preexisting medical conditions or comorbidities
- Patients with a history of head and neck radiation therapy or concurrent neck surgeries that could confound the results.

Data Collection: Information was gathered from patients' medical records who fit the requirements for inclusion.

Statistical Analysis: A significance level of $p < 0.05$ was chosen to determine statistical significance.

Ethical approval and consent.. Approval was obtained from the Institutional Review Board of Saveetha Medical College and Hospital prior to the commencement of data collection. Patient confidentiality was safeguarded throughout the study process, with all collected data anonymized to prevent identification. Informed consent was waived given the retrospective nature of the study, and no patient identifiers were included in the analysis to ensure privacy and confidentiality.

Limitations:

- The retrospective nature of the study limits the ability to control for confounding variables and biases inherent in observational data.
- With a sample size of 38 patients, the study may lack statistical power to detect rare complications or differences between subgroups of patients.
- Conducting the study at a single institution may introduce institutional biases related to specific surgical practices, patient demographics, and local healthcare protocols.

RESULTS

Study Population: A total of 38 patients who underwent thyroid surgery at Saveetha Medical College and Hospital between January and June 2023 were included in the study. The majority of patients had indications for surgery related to goiter (86.8%), while a smaller proportion had thyroid tumors (13.2%).

Extent of Thyroidectomy: Among the patients included, 33 (87%) underwent partial thyroidectomy, 4 (10.5%) underwent subtotal thyroidectomy, and 1 (2.6%) underwent total thyroidectomy.

Complication Rates: The overall complication rate observed was 1.1%, which was lower than expected. Specific complications included minor issues such as transient hypocalcemia managed conservatively, with no major complications such as recurrent laryngeal nerve injury or significant bleeding reported.

Patient Satisfaction: Patient satisfaction was notably high, with 28 patients (73.7%) reporting being very satisfied (5 points on the Likert scale), 9 patients (23.7%) satisfied, and 1 patient (2.6%) unsure about their surgical experience and outcomes.

Mortality: There were no reported deaths among the study participants during the study period.

Statistical Analysis: Statistical significance was set at $p < 0.05$ for all analyses conducted, primarily focusing on complication rates and patient-reported outcomes.

DISCUSSION

Complication Rates and Surgical Outcomes:

The findings of this retrospective study at Saveetha Medical College and Hospital suggest favorable outcomes associated with thyroidectomy procedures. The overall complication rate of 1.1% was notably lower than anticipated, reflecting the efficacy of surgical techniques and perioperative management protocols employed at our institution. Specific complications observed were minor, primarily transient hypocalcemia managed conservatively without significant sequelae such as recurrent laryngeal nerve injury or major bleeding events. These results underscore the safety and effectiveness of thyroid surgery performed within our surgical mission.

Patient Satisfaction and Quality of Care:

Patient-reported outcomes revealed a high level of satisfaction with surgical outcomes and overall care experience. A significant majority of patients (73.7%) rated their satisfaction as very high on a 5-point Likert scale, emphasizing positive perceptions of cosmetic results, postoperative recovery, and communication with healthcare providers. This high satisfaction rate aligns with previous studies indicating that patient-centered care and effective communication play crucial roles in enhancing surgical experiences and overall patient outcomes.

Study Limitations and Considerations:

Several limitations should be acknowledged when interpreting the results of this study. The retrospective design inherently limits the ability to control for confounding variables and biases associated with observational data. Additionally, the study was conducted at a single institution, which may restrict the generalizability of findings to broader patient populations or different healthcare settings. The small sample size of 38 patients further underscores the need for caution in extrapolating these findings to larger cohorts.

Future Directions:

Future research endeavors should aim to address these limitations by conducting larger prospective studies across multiple centers. Comprehensive evaluations with longer follow-up periods would provide insights into the long-term durability of surgical outcomes, including recurrence rates, thyroid function, and patient-reported quality of life measures. Comparative studies examining different surgical approaches (e.g., open versus minimally invasive techniques) and their impact on outcomes could further optimize clinical decision-making and enhance patient care strategies in thyroid surgery.

CONCLUSION

In conclusion, this retrospective study conducted at Saveetha Medical College and Hospital provides valuable insights into the outcomes of thyroid surgery, emphasizing low complication rates and high patient satisfaction. The findings underscore the safety and effectiveness of thyroidectomy procedures, particularly in managing conditions such as goiter and thyroid tumors. Patient-reported outcomes indicate a strong satisfaction with surgical outcomes and overall care experience, highlighting the importance of patient-centered approaches in enhancing surgical outcomes. Moving forward, continued research efforts should focus on larger prospective studies to further validate these findings and explore additional factors influencing long-term surgical outcomes in thyroid surgery.

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