

Evaluation of Post Thyroidectomy Complications – A Retrospective Study in CMCH (A Tertiary Care Hospital) Coimbatore

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ARTICLE INFO	ABSTRACT
Published Online: 25 November 2018	Aim: To analyse and evaluate the complications related to thyroidectomy surgeries and how to prevent them Methodology: Patients admitted in General Surgery department, Coimbatore Medical College and Hospital for thyroid disorders taken up for thyroidectomy surgeries under certain indications Results: Total number of patients included in the study group are 73. Most common are female patients of about 71 patients. Most common age group is between is between 30-40. Most common indication for thyroidectomy surgeries is being Multinodular goitre and the most commonly done surgery is being Total thyroidectomy
Corresponding Author: Dr. V. Lekshminarayani M.S , D.G.O.	Conclusion: Total thyroidectomy surgeries are associated with increased incidence of complications rather than subtotal or hemithyroidectomy. The complications may be prevented by careful intraoperative nerve and gland dissection and close monitoring of postoperative period
KEYWORDS: thyroid, thyroidectomy, complications, analysis	

INTRODUCTION

Thyroid surgery is being the most commonly performed endocrine surgery nowadays. Assessing the complications related to thyroid surgery are important in order to anticipate complications earlier and prevent them. Several factors are considered relating to thyroidectomy complications.

Thyroidectomy complications may be transient or permanent. The main complications associated with thyroidectomy include injury to the recurrent laryngeal nerve, damage to the parathyroid glands and hypocalcemia, postoperative hematoma and respiratory obstruction, wound infection, superior laryngeal nerve damage, tracheomalacia, and thyroid storm. Recurrent laryngeal nerve injury and hypoparathyroidism have the potential to be lifelong.

The relationship between patient factors and postoperative complications is complex and influenced by intrinsic disease factors, patient comorbidities, and operative management.

MATERIALS AND METHODS

Study Area :

Coimbatore Medical College Hospital [CMCH] , Coimbatore.

Study population: Patients admitted in the general surgery department of CMCH with thyroid disorders taken up for thyroidectomy surgeries

Inclusion criteria:

1. Patients diagnosed to have thyroid disorders.
2. Patients above 18 years
3. Patients who are willing for thyroidectomy surgery.
4. Patients willing for follow up.

Study Period:

10 Months. From December 2017-September 2018

Sample Size:

All patients eligible by inclusion criteria are to be included in the study.

Study Design:

An retrospective study is to be conducted on patients admitted in CMCH for the above study. Informed consent will be taken from each respondent

Discussion:

3 female patients who were diagnosed MNG underwent total thyroidectomy. of the three patients., two developed RLN Palsy and respiratory distress, stridor for which emergency tracheostomy was done. One Patient was discharged and is on regular follow up and another patient expired. Third patient developed esophago cutaneous fistula esophageal resection and anastomosis with sternocleidoma - stoid with excision of fistulous tract done was done successfully and the patient is on follow up.

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Table [1]: Sex Distribution

Gender	Number	Percentage
Male	2	3%
Female	71	97%

From the above table , the total number of male patients included in the study group are 2 which is 3% of the total study population and female patients are 71 which is 97% of the total study population. The range of age group of both the male and female study population is 20-70 years.

Table [2] : Age Wise Distribution

Age Group	Male	Female	Total
20 – 30 Years	-	12	12
30 – 40 Years	-	27	27
40 – 50 Years	-	16	16
50 – 60 Years	1	9	10
60 – 70 Years	1	7	8
Total	2	71	73

From the above table , the most common age group of the study population included is 30-40 years and the second most common age group is 40-50 years. The least common age group noted in the study population is 60-70 years.

Table [3]: Causes of Thyroidectomy

Diagnosis	Number Of Cases	Percentage
Multinodular Goitre	40	55%
Solitary Nodular Goitre	28	38%
Follicular Neoplasm	3	4%
Papillary Carcinoma	1	1.5%
Diffuse Colloid Goitre	1	1.5%
Total	73	100%

From the above table , it is described that the most common diagnosis in patients undergoing thyroidectomy surgery is Multinodular Goitre which are 40 cases whose percentage is 55%. The second most common diagnosis is solitary nodular goitre which accounts for 38% and the least common diagnosis is papillary carcinoma and diffuse colloid goitre which accounts for 1.5%.

Table [4] : Surgery Performed

Type Of Procedure	Total Thyroidectomy	Subtotal Thyroidectomy	Left / Right Hemithyroidectomy
No Of Surgery Performed	30	11	32

from the above table , it is described that right / left hemithyroidectomy is the most commonly performed surgery in this study.

Table [5] : Complications Encountered

Complica-tions	Total Thyoide-ctomy	Subtotal Thyoide-ctomy	Left/Right Hemithyroid-ctomy	Total
Hypocalcemia	6	2	-	8
Recurrent Laryngeal Nerve Palsy	3	2	1	6
Postoperative Hematoma	2	-	-	2
Seroma	4	2	1	7
Total	15	6	2	23

From the above table , it is described that the most common complication is hypocalcemia which are 8 cases and is most commonly associated with total thyroidectomy. The second most common complications is seroma which are 7 cases. The next complication is recurrent laryngeal nerve injury occurring for a total of 6 cases maximum with total thyroidectomy. The least common complication is hematoma which are 2 cases.

CONCLUSION

Patients presenting to the General surgery department of Coimbatore medical college and hospital with thyroid disorders taken up for thyroidectomy surgeries were analysed. The most common age group of patients was found to be 30-40 years in which most of the patients included in the study group were female patients. The most common diagnosis patients undergoing thyroidectomy surgeries was found to be multinodular goitre. The most common thyroidectomy surgery with complication is being Total thyroidectomy. The most common complication is hypocalcemia which can be managed. Recurrent laryngeal nerve injury was encountered in 6 patients, which can be prevented by identification of nerve during surgery, avoidance of cautery when dissecting in the region of berry ligaments, awareness regarding non recurrent laryngeal nerve, meticulous hemostasis and precise dissection between thyroid capsule and sheath. Good surgical monitoring of patients is invaluable and helps in the early detection and management of such complications.

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