



A STUDY OF PREPONDERANCE OF THYROID SWELLINGS IN FEMALES AND THEIR POST-OPERATIVE COMPLICATIONS

**Dr.V.SUJATHA
M.S**

ASST PROFESSOR,DEPARTMENT OF GENERAL SURGERY, KAPV MEDICAL COLLEGE TIRUCHIRAPALLI.

Dr.D.UMA M.S

ASST PROFESSOR,DEPARTMENT OF GENERAL SURGERY,KAPV MEDICAL COLLEGE TIRUCHIRAPALLI.

ABSTRACT

INTRODUCTION: Multi nodular swellings of the thyroid are one of the common presentations amongst thyroid swellings in our Surgery OPD. We base our diagnosis on FNAC and thyroid profile depending on which management is decided as medical or surgical. Surgical management is usually taken up for cosmetic or in case of malignancies as curative mode. Post operative complications often result from densely adherent swellings or inflammatory disorders co-existing morbidity and mortality are often managed accordingly.

AIM: To study post-operative complications of thyroid surgeries and their resulting morbidity.

MATERIALS AND METHODS: The study materials consist of 50 patients with thyroid swellings who underwent Hemi-and subtotal thyroidectomy during Jan 2016 to Dec 2016 at K. A.P.V. MGMGH Tiruchirapalli.

RESULTS AND OBSERVATION: 50 female patients aged between 30-60 years with complaints of MNG, Solitary nodule or diffuse enlargement of thyroid with pain were included in this study. Incidence of complications was 20%. In our study, majority of the complications were found to occur in female patients. The highest incidence of complications was noted in patients with MNG and the lowest incidence of complications was noted in Diffuse colloid goitre. The most common HPE diagnosis was MNG. The surgical procedures performed, depend upon our FNAC reports and TFT studies. In our study, vocal cord palsy, hypocalcemia, transient neuropraxia are the main post-operative morbid complications.

CONCLUSION: Our study was conducted to assess the incidence of complications in thyroidectomy procedures done in 50 female patients admitted to KAPV MGMGH. The 3 major complications seen in our patients were hypocalcemia, permanent vocal cord damage, transient RLN palsy due to neuropraxia and airway obstruction. All complications were intensively managed and patients were followed up for a period of 3 months. There was no incidence of thyroid storm as our patients were adequately prepared. Prompt and early management may grossly reduce patient morbidity.

KEYWORDS : .Thyroid, parathyroid, multinodular goitre, thyroidectomy, vocal cord palsy.

INTRODUCTION:

Thyroid swellings are one of the most common causes of endocrine and metabolic disorders in females with surgery being the final choice of treatment in the majority of patients. Thyroid surgery even in the most experienced hands may end up in complications even though ultimate precautions and care taken during surgical procedures. In this age, where thyroid surgeries have become a daycare procedure, incidence of life threatening complications such as post-operative haemorrhage, respiratory distress, thyroid storms and vocal palsy do occur. This study is aimed at assessing the outcome of post-operative complications in various thyroidectomy procedures, the importance of pre-operative preparations, careful surgical dissection and early management of any post-operative morbidity giving the patient an ultimate satisfactory health care.

AIM OF STUDY:

To study the early post-operative complications of thyroidectomy and intensive early management.

MATERIALS AND METHODOLOGY:

The study material consists of 50 patients with thyroid swellings who underwent elective thyroidectomy procedure at MGMGH after thorough clinical examination, history taking, complete blood profile analysis, thyroid profile study, FNAC, USG thyroid, ENT evaluation; Patients were admitted for surgery-hemi and subtotal thyroidectomy, total thyroidectomy, monitored throughout their hospital stay and discharged. Specimens were sent for HPE examination and subsequent follow up made.

OBSERVATION AND RESULTS:

In our study, the following post-operative complications which occurred after subtotal, hemi and near total thyroidectomies, operated at KAPV. MGMGH, were scrutinised. In 50 female patients aged between 30-60 years were included in our study. Youngest being 30 and the eldest being around 55 years of age. Around 50 patients with complaints of MNG, Solitary nodule or diffuse enlargement of thyroid with pain were included in this study.

	NO. OF CASES	NO. OF CASES WITH COMPLICATIONS	PERCENTAGE
30-35	9	2	22.2%
35-40	21	2	9%
40-45	13	5	38%
45-55	7	1	14.28%

TABLE-1: AGE WISE INCIDENCE OF COMPLICATIONS

Many of the patients who developed morbid complications were found to be in the 4th decade of life. Incidence of complications was 20%.

SEX OF THE PATIENT	NO. OF CASES	NO. OF CASES WITH COMPLICATIONS	PERCENTAGE
MALE	1	NIL	0
FEMALE	49	10	20.4%
TOTAL	50	10	20%

TABLE-2: SEX-WISE INCIDENCE OF COMPLICATIONS

In our study, majority of the complications were found to occur in female patients.

HPE DIAGNOSIS	NO. OF CASES	NO. OF PATIENTS WITH COMPLICATIONS	PERCENTAGE
MULTINODULAR GOITRE	31	5	16.12%
DIFFUSE COLLOID GOITRE	5	1	20%
HASHIMOTO'S THYROIDITIS	5	2	40%
SOLITARY NODULAR GOITRE	5	1	20%
PAPILLARY CARCINOMA	2	1	50%
FOLLICULAR CARCINOMA	2	-	0

TABLE-3: INCIDENCE OF COMPLICATIONS WITH REFERENCE TO HPE

In our study, the highest incidence of complications was noted in patients with Multi nodular goitre and the lowest incidence of complications was noted in Diffuse colloid goitre. The most common HPE diagnosis was multi nodular goitre. The surgical procedures performed depend upon our FNAC reports and TFT studies.

TYPE OF THYROIDECTOMY	NO.OF CASES	NO. OF CASES WITH COMPLICATIONS	PERCENTAGE
TOTAL THYROIDECTOMY	27	7	25.92%
TOTAL THYROIDECTOMY+MRND	2	1	50%
SUBTOTOTAL THYROIDECTOMY	10	2	20%
R/L HEMITHYROIDECTOMY	11	-	0

TABLE-4.INCIDENT OF COMPLICATIONS WITH REFERENCE TO THE TYPE OF THYROIDECTOMY

One patient went in for bilateral RLN palsy with respiratory stridor managed with tracheostomy and recovered. 5 patients were treated with high dose post operative steroids relieving the physiological neuropraxia. Post-operative hypocalcemia managed with intensive IV Calcitonin therapy and ICU care.

POST-OPERATIVE COMPLICATIONS	NO. OF CASES	PERCENTAGE
TRANSIENT HYPOCALCEMIA	7	14%
TRANSIENT RLN PALSY	2	4%
AIRWAY OBSTRUCTION	1	2%
TOTAL	10	20%

TABLE-5.POST OPERATIVE COMPLICATIONS AND THEIR INCIDENCE

In our study, vocal cord palsy, hypocalcemia, transient neuropraxia are the main post-operative morbid complications with minimal incidence of post-op haemorrhage seen only in one or two patients due to elevated systemic hypertension. Permanent voice loss occurred in 2 patients. Respiratory distress and stridor were managed with tracheostomy in 2 patients. These patients were followed up in 3 months period and found to recover from complications except in 2 cases where voice loss was permanent. There was no incidence of thyroid storm due to adequate pre operative preparation of cases.

DISCUSSION:

In our study, 50 patients mostly female, who underwent thyroidectomy procedure were analysed to note the occurrence of various early post operative complications. The youngest patient was aged 30 years, oldest being 55. Maximum number of morbid complications occurred in the 40-50 years of age, that is, 60% and the lowest incidence being 30-40 years, that is, 40%. Male and female ratio is 1:49. Incidence of complications is more in females, almost 75%. The most common surgery performed is Total thyroidectomy and the total incidence of complications is around 20%. The most common transient complication was hypocalcemia, which correlates well with the study of Richmond et al [1]. Transient RLN palsy which was noticed in 6 patients with incidence of 6% as compared to studies of Chow et al [2], who noticed an incidence of 2%. Other complications like wound infection, wound haematoma and thyroid storm were not seen in our study. Similar to studies of Steurer et al [3] and Erbil et al [4]. The highest incidence of complications was seen in multinodular goitre patients who underwent total thyroidectomy in our study. All the patients with complications were well managed and recovered during the follow up period of 3 months.

CONCLUSION:

Our study was conducted to assess the incidence of complications in thyroidectomy procedures done in 50 female patients admitted to KAPVGMGMGH. The 3 major complications seen in our patients were hypocalcemia in 5 patients, permanent vocal cord damage in 1 patient, transient RLN palsy due to neuropraxia in 3 patients and airway obstruction in one patient. All complications were intensively managed and patients were followed up for a period of 3 months. Permanent RLN palsy occurred in 1 patient. No incidence of stitch granuloma or post operative haemorrhage was seen in our patients. There was no incidence of thyroid storm as our patients were adequately prepared. We can therefore conclude that thorough

knowledge of anatomy with meticulous dissection of RLN, preservation of parathyroid glands may lead to a good post operative outcome following thyroid surgery. In the event of any complications, prompt and early management may grossly reduce patient morbidity.

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