VOLUME - 9, ISSUE - 10, October - 2020 • PRINT ISSN No. 2277 - 8160 • DOI : 10.36106/gjra

Original Research Paper

General Surgery

RETROSPECTIVE ANALYSIS OF OUTCOME OF DRAINLESS TOTAL THYROIDECTOMY –IN A SINGLE INSTITUTION STUDY

Dr. Ponmuthu Assistant professor of general surgery, Government stanley medical college, Chennai-1

Dr. Ravishankar* Assistant professor of general surgery, Government Tirupur medical college, Tirupur. *Corresponding Author

ABSTRACT

Introduction: Drains have been placed perioperatively during thyroid surgery with the notion that doing so would prevents complications like hematoma and seroma formation postoperatively, but the literature lacks any candid data to support this concept. The incidence rates of hematomas requiring surgical intervention are low, reportedly 0–1.5%.(1,2). Total thyroidectomy done for benign thyroid lesions, it was a routine practice to keep a drain. Rationale being post-operative bleeding will be indicated earlier by drain and it prevent the seroma formation.

Aim of the study 1. To study the outcome of drainless total thyroidectomy surgery.

Materials and methods: All drainless total thyroidectomy patients operated at Stanley medical college by same surgeon from march 2015 to December 2017. Post operative period monitored for bleeding and seroma formation. All data were collected and evaluated with post operative complications like post-operative bleeding, seroma formation. Analysis done using standard statistical methods.

Results: We operated 32 cases of total thyroidectomy for benign thyroid disorder and all cases drain was not placed. And we found no cases had been re-operated. No cases had been complicated with seroma formation. Post operative complications like bleeding or seroma formation was not occurred in this study.

Conclusion: In our study we concluded that total thyroidectomy performed for benign thyroid disorders and neck dissection was not part of surgery drain can be avoided safely. Neither bleeding nor seroma can be prevented by drain. Unsightly drain site scar only persisted post operatively.

KEYWORDS : Drainless total thyroidectomy, seroma formation,

INTRODUCTION

Drains have been placed perioperatively during thyroid surgery with the notion that doing so would prevents complications like hematoma and seroma formation postoperatively, but the literature lacks any candid data to support this concept. The incidence rates of hematomas requiring surgical intervention are low, reportedly 0–1.5%.(1,2). Total thyroidectomy done for benign thyroid lesions, it was a routine practice to keep a drain. Rationale being post-operative bleeding will be indicated earlier by drain and it prevent the seroma formation.

AIM OF THE STUDY

1. To study the outcome of drainless total thyroidectomy surgery.

MATERIALS AND METHODS

Study period: March 2014 to December 2017

INCLUSION CRITERIA

1. All total thyroidectomy patients operated at Govt Stanley hospital, chennai
2. >18 and <60 yrs included
3. No drain placed intra-operative
4. Thyroidectomy done for benign thyroid conditions.

EXCLUSION CRITERIA

1. <18yrs >60 yrs
2. Surgery done for malignant conditions
3. Patients who underwent Neck dissection
4. Total thyroidectomy who were kept drain intra -operatively

All cases operated at Stanley medical college by same surgeon. Post operative period monitored for bleeding and seroma formation. All data were collected and evaluated with post operative complications like post-operative bleeding, seroma formation. Analysis done using standard statistical methods.

RESULTS

We operated 32 cases of total thyroidectomy for benign thyroid disorder and all cases drain was not placed. And we found no cases had been reoperated. No cases had been complicated with seroma formation. Post operative complications like bleeding or seroma formation was not occurred in this study..

DISCUSSION

We strongly believed that drain in thyroid surgery was not necessary if neck dissection was a part of surgery. Drain doesnot prevent anykind of bleeding or seroma formation in thyroid surgery. And drain site may give a unsightly scar.

Wihlborg et al published results of their trial, which included thyroid surgeries of a different extent, and found no difference in seroma formation between the groups with and without drains.(3)

Ariyanayagam et al evaluated 260 consecutive thyroid surgeries in which 18 were re-operations, 5 for carcinoma and 13 for multinodular goiter. Total 80 bilateral procedures were performed. A drain was used only in one case.(4)

Neary et al analyzed 93 patients after they were randomized for fluid in the thyroid bed on post-operative days 1 and 2. The fluid collection was significantly higher in the group without drains. One of the fears in the mind of the surgeon performing thyroid surgeries is the presence of dead space left after the removal of the thyroid gland, with subsequent potential for fluid collection. Neary et al, in a subgroup analysis of their no drain randomized arm, found significantly higher fluid collections in total thyroidectomies compared with other thyroid surgeries.(5)

Memon et al randomized 60 patients to assess seroma formation in drain and no drain groups following lobectomy or subtotal lobectomy for non-cancerous thyroid lesions. No seroma formation was noted in either of the two arms.(6)

Deveci et al randomized 400 patients, who underwent either a total thyroidectomy or a lobectomy for all kinds of thyroid disorders, into drain and no drain groups. Seroma formation

was noted in 2% of the patients with no drain in place, and in 1.5% of the patients with drains.(7)

CONCLUSION

In our study we concluded that total thyroidectomy performed for benign thyroid disorders and neck dissection was not part of surgery drain can be avoided safely. Neither bleeding nor seroma can be prevented by drain. Unsightly drain site scar only persisted post operatively.

REFERENCES

1 Shaha A R, Jaffe B M. Practical management of post-thyroidectomy hematoma. J Surg Oncol. 1994;57(04):235–238.

3. Abbas G, Dubner S, Heller K S. Re-operation for bleeding after thyroidectomy and parathyroidectomy. Head Neck. 2001;23(07):544–546.

4. Wihlborg O, Bergljung L, Mårtensson H. To drain or not to drain in thyroid surgery. A controlled clinical study. Arch Surg. 1988;123(01):40–41.

5. Ariyanayagam D C, Naraynsingh V, Busby D, Sieunarine K, Raju G, Jankey N. Thyroid surgery without drainage: 15 years of clinical experience. J R Coll Surg Edinb. 1993;38(02):69–70.

6. Neary P M, O'Connor O J, Shafiq A et al.The impact of routine open nonsuction drainage on fluid accumulation after thyroid surgery: a prospective randomised clinical trial. World J Surg Oncol. 2012;10:72

7. 11. Memon Z A, Ahmed G, Khan S R, Khalid M, Sultan N. Postoperative use of drain in thyroid lobectomy - a randomized clinical trial conducted at Civil Hospital, Karachi, Pakistan. Thyroid Res. 2012;5(01):9.

8. 12. Deveci U, Altintoprak F, Sertan Kapakli M et al.Is the use of a drain for thyroid surgery realistic? A prospective randomized interventional study. J Thyroid Res. 2013;2013:285768.