ABSTRACT

Objective: To evaluate the necessity of placing a drain in post-thyroidectomy patients, we aimed to determine whether insertion of a passive drain as compared to no drain in post-thyroidectomy patients would significantly affect hematoma formation, wound infection, wound dehiscence and length of hospital stay.

Methods:

- **Design:** Prospective randomized controlled trial  
- **Setting:** Tertiary government training hospital  
- **Subjects:** Patients who underwent thyroidectomy for various thyroid pathologies were divided into two postoperative treatment arms: one group with insertion of a passive drain, and another group without a drain. Hematoma, wound infection, wound dehiscence and length of hospital stay were the outcomes measured per treatment arm.

Results: A total of 66 patients were evaluated. There were 54 females (81.81%) and 12 males (18.18%). The mean age for the drain group was 44.88 years and 43.67 years for the no drain group. Four patients developed complications in the drain group and two developed complications in the no drain group. The rate of complications between both groups was not statistically significant. The mean hospital stay of the drain group was 3.15 days which in the no drain group was 2.51 days. The difference in length of hospital stay was statistically significant.

Conclusion: There was no difference in the development of complications among the drain and no drain group. Thyroidectomy without surgical drains was associated with a significant reduction in hospital stay compared to thyroidectomy with routine placement of drains.

Keywords: surgical drainage / methods, hematoma / prevention and control, postoperative complications / prevention and control, thyroid disease / surgery, thyroidectomy / methods

Many surgeons practice the tradition of leaving a drain after thyroid surgery with the hope that this will obliterate dead space and prevent hematoma and seroma formation in the thyroid bed by passive evacuation. This belief is further reinforced by the fact that postoperative drains usually yield fluid. However, blood and serum that are supposed to drain may block drains. Drains also add to discomfort, give extra scar and may increase hospital stay. Khanna et al. pointed out that placement of drains after routine thyroid surgery may induce rather than prevent