Abstract

Background

Prophylactic drainage after thyroidectomy has been a regular practice at Kenyatta National Hospital(KNH). This has been used for the potential to avert postoperative fluid accumulation (hematoma or seroma) and also for detection of continuing bleeding. This is aimed at preventing or delaying airway compression that has potential for serious morbidity and mortality. However their importance in these situations has been questioned in recent literature.

Objective

To evaluate the difference in outcomes in drained versus non-drained groups after thyroidectomy for benign thyroid disorders.

Study design

Prospective randomized clinical study consisting of 90 patients who were admitted for total thyroidectomy and were randomized into two groups of 45 participants.

Setting

The general surgical wards and theatres at Kenyatta National Hospital.

Methods

Ninety consecutive patients with benign thyroid disorders scheduled for total thyroidectomy or lobectomy, who met the inclusion criteria were recruited over a study period of 9 months from January to September 2011. They were randomly assigned to one group in whom closed drains were used and another in whom no drains were used after thyroidectomy. They were then evaluated postoperatively for hematoma and seroma formation, pain assessed by the visual analogue scale (VAS), duration of hospital stay and necessity for re-operation.

Results

The mean VAS score was significantly lower in the non-drained group patients at 6, 12 and 24 hours postoperatively ($p= 0.001$). Four cases of hematoma (8.9%) occurred in the drained group, whereas none of patients in the non-drained group developed hematoma ($p=0.04$). None of the patients in the non-drain group had post-surgical wound infection whereas four (9%) of those who had drains developed wound sepsis. No participant required re-operation for any complication nor developed seroma and all complications were successfully managed conservatively.

Conclusion

Prophylactic drainage after thyroidectomy for benign goiters does not show any benefit in hematoma prevention and is associated with increased hospital stay and post-operative pain.