COMPARISON OF NATURAL DRAINAGE GROUP AND NEGATIVE DRAINAGE GROUPS AFTER TOTAL THYROIDECTOMY: PROSPECTIVE RANDOMIZED CONTROLLED STUDY.

woo, seung hoon[1]; kim, jinpyeong[1]; Kwon, Oh Jin[1]
[1]Department of Otolaryngology and Institute of Health Sciences, Gyeongsang National University, Jinju, Korea, Korea, Republic of

Background/Purpose: The aim of this study was to compare a negative pressure drain with a natural drain in order to determine whether a negative pressure drainage tube causes an increase in the drainage volume.
Methods: Sixty-two patients who underwent total thyroidectomy for papillary thyroid carcinoma (PTC) were enrolled in the study between March 2010 and August 2010 at Gyeongsang National University Hospital. The patients were prospectively and randomly assigned to two groups, a negative pressure drainage group (n=32) and natural drainage group (n=30). Every 3 hours, the volume of drainage was checked in the two groups until the tube was removed.
Results: The amount of drainage during the first 24 hours postoperatively was 41.68 ± 3.93 mL in the negative drain group and 25.3 ± 2.68 mL in the natural drain group ($p<0.001$). After 24 additional hours, the negative drain group was 35.19 ± 4.26 mL and natural drain groups 21.53 ± 2.90 mL ($p<0.001$). However, the drainage at postoperative day 3 was not statistically different between the two groups. In addition, the vocal cord palsy and temporary and permanent hypocalcemia were not different between the two groups.
Discussion & Conclusion: These results indicate that a negative pressure drain may increase the amount of drainage during the first 24-48 hours postoperatively. Therefore, it is not necessary to place a closed suction drain when only a total thyroidectomy is done.