

performed after identification of recurrent laryngeal nerves and at least one parathyroid gland on each side.

Statistical analysis

The data were analyzed using SPSS 11.0 for windows; comparisons of the data were done by wilcoxon and chi-square tests. The results were expressed as mean \pm SD and $P < 0.05$ was accepted to be statistically significant.

Results

The mean age of the 100 patients was found to be 48 ± 11 years (range 18-69 years). The female/ male ratio was calculated to be 8.5/1.5 (n=85/15). Among all patients, 46 patients underwent bilateral near total thyroidectomy and 54 patients underwent bilateral subtotal thyroidectomy. Here was no mortality in both groups in this study. The evaluation of the patients with/ without ligasure usage, the operative time and duration of the hospital stay in group one was (58 min.), (1.4 days)

respectively were significantly lower than those in group two (75 min.), (2.5 days) as $P < 0.05$ as shown in table 1.

The complication rates of ligasure group (group one) were significantly lower than those in clamp and tie technique (group two) ($P < 0.005$), permanent vocal cord palsy and permanent hypoparathyroidism were not encountered in this study. Patients had postoperative incidence of temporary hypoparathyroidism (n=3) 6.6% in group one while (n=5) 9% in group two. Temporary recurrent laryngeal nerve palsy (n=1) 2.2% in group one while (n=10) 20% in group two, seroma (n=2) 4% in group one while (n=5) 9% in group two, hemorrhage (n=0) in group one while (n=3) 6% in group two, wound infection (n=2) 4% in group one while (n=5) 9% in group two and cervical hematoma (n=1) 2.2% in group one while (n=3) 6% in group two as shown in table 2.

Table 1. Demographic features of ligasure group and clamp and tie surgical technique group

Feature	Group I N = 45	Group II N = 55	P Value
Age (years)	47 (21-69)	41 (18-67)	0.066
Mean operation time (minutes)	58	75	0.0001
Mean hospital stay (days)	1.4 (1-3)	2.5 (1-5)	0.001

Group I = Ligasure group, Group II = Clamp and tie technical group

Table 2. Postoperative complications that occurred in ligasure group and clamp and tie surgical technique group

Complication	Group I N = 45	Group II N = 55	P Value
Temporary hypoparathyroidism	3 (6.6%)	5 (9%)	0.004
Permanent hypoparathyroidism	0	0	-
Temporary recurrent Laryngeal nerve palsy	1 (2.2%)	10 (18.18%)	0.003
Permanent recurrent Laryngeal nerve palsy	0	0	-
Seroma	2 (4%)	7 (13%)	0.004
Hemorrhage	0	3 (6%)	0.003
Wound infection	2 (4%)	5 (9%)	ns
Cervical hematoma	1 (2.2%)	3 (6%)	ns

Group I = Ligasure group, Group II = Clamp and tie technical group