## Ligasure versus ligature for total thyroidectomy: Is there a difference?

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**Objective:** The present controlled randomized study was conducted to compare operative details and post-operative outcomes in consecutive patients undergoing LigaSure total thyroidectomy (LTT) or conventional total thyroidectomy (CTT).

**Methods:** All patients (n=196) requiring total thyroidectomy (TT) for benign (n=169, 86.2%) or malignant (n=27, 13.8%) thyroid disease, at the Main Alexandria University Hospital, Egypt, and Ahmadi Hospital, Kuwait, during 2010-2012, were randomized to undergo either LTT (n=96) or CTT (n=100). Patients' demographics, indication for surgery, operative details, hospital stay, time off-work, and postoperative pain and complications, were all prospectively recorded. Patients were followed-up for 12-36 months.

Results: There were 174 (88.8%) women and 22 (11.2%) men, with a mean age of  $36.2\pm5.79$  years (range 18-49 years). There were no statistically significant differences in age, gender, indication for surgery, and length of incision between both groups. LigaSure TT resulted in significantly shorter operative time ( $62\pm16.5$  minutes versus  $89\pm11.6$  minutes, respectively, P=0.001), reduced intra- and post-operative blood loss (mean difference  $60\pm10.5$  ml), less post-operative pain and parenteral analgesia, shorter hospital stay, and more rapid return to work. There were no significant differences in post-operative complications between both groups. After LTT, six patients (6.3%) suffered from transient (<6 months) hypocalcemia and four (4.2%) suffered from transient recurrent laryngeal nerve palsy as compared to seven patients (7%) and six patients (6%), respectively after CTT (9>0.05).

**Conclusion:** LigaSure TT is as safe as CTT, with the additional benefit of reduced operative time, less post-operative pain, shorter hospital stay and more rapid return to work.

## **Biography**

Mahmoud F. Sakr has completed his Master's Degree in Surgery at the age of 27 years and his Ph.D. at the age of 32 years from University of Alexandria, Egypt, and had his fellowship in Surgery and Organ Transplantation at the Pittsburgh University School of Medicine, PA, USA. He is the Chief of the Head and Neck and Endocrine Surgery Department at the Faculty of Medicine, Alexandria University, Egypt. He has published more than 10 surgical books and 85 papers in reputed journals and has been serving as an editorial board member of repute.

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