

Minimally invasive video-assisted thyroidectomy (mivat) vs. conventional thyroidectomy for benign thyroid disease: A controlled randomized trial

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Objective: To assess minimally invasive video-assisted thyroidectomy (MIVAT) as compared to conventional thyroidectomy (CT) for benign disease.

Methods: Between January 2009 and January 2012, 96 patients with benign thyroid disease were randomized to undergo either MIVAT (Group 1, n=48) or CT (Group 2, n=48). Eligibility criteria were thyroid nodules <35 mm, thyroid volume <25 ml, no thyroiditis or malignancy, and no previous cervical surgery or irradiation. Data collected included patient demographics, indication for surgery, length of incision, duration of operation, hospital stay, post-operative pain (day 1), cosmetic appearance (one month post-operatively), and post-operative complications. Patients were followed-up regularly for a mean of 24.5 months.

Results: No significant differences were found between both groups in terms of age, gender, thyroid volume, maximum nodule diameter, indication for surgery and postoperative complications. There were 3 cases (6.25%) of temporary hypocalcemia after MIVAT as compared to two cases (4.17%) after CT ($P>0.05$). One case of hematoma was encountered with CT only (2.08%). MIVAT yielded a significantly smaller cervical incision than CT (2 ± 0.4 cm versus 8 ± 2.6 cm, respectively), less postoperative pain and parenteral analgesics, better cosmetic result, and shorter hospital stay than patients who underwent CT (1.1 days versus 2.4 days, $P=0.014$). Operative time was, however, significantly ($P=0.001$) longer with MIVAT than with CT (75 ± 18 min versus 55 ± 12 min, respectively).

Conclusion: Though with a longer operative time, MIVAT may be preferable to CT in selected cases, because of its significant advantages, in terms of a better cosmetic result, less postoperative pain, and shorter hospital stay.

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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