



Robotic Thyroidectomy and Infection

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Oncoplastic surgery is constantly improved because of increasing rates of thyroid cancer and requirement of a good cosmesis in those patients in order to eliminate a large neck scar. Bilateral axillo-breast approach (BABA) provides a symmetric and good view during the procedure. Follow-up studies show that permanent hypoparathyroidism (hypocalcemia) and laryngeal nerve damage (hoarseness) may be observed as postoperative complications.

In one study, 704 patients received BABA robot-assisted endoscopic thyroidectomy (RoT): 7.8% total thyroidectomy, 66.3% total thyroidectomy + central neck dissection, 4.8% total thyroidectomy + central and lateral neck dissection, 9.5% subtotal thyroidectomy, and 10.4% lobectomy. There was no infectious complication among those patients (1). Between 2008-2009, 41 patients received RoT because of thyroid nodules. Unilateral axillo-breast or axillary approach was used. No infection complication was found (2). Between the same year period in a case series of 302 patients, 138 open and 69 BABA RoT were performed. Again, no infection complication was observed (3). In another study, 109 patients underwent robotic total thyroidectomy because of papillary thyroid cancer. BABA method was preferred. No complication was determined (4). Between 2007-2009, 1043 patients (71 male and 972 female) with low-risk differentiated thyroid carcinoma received 366 total thyroidectomy and 677 subtotal thyroidectomy by robotic method using transaxillary approach performed by 5 surgeons in 4 centers. No infection complication was observed other than 21 (2%) wound leakage cases (5).

In conclusion, infectious complication is generally not observed in robotic thyroidectomy method.

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