

ROBOTIC TOTAL THYROIDECTOMY AND MODIFIED RADICAL NECK DISSECTION FOR PAPILLARY THYROID CARCINOMA WITH LATERAL NECK NODE METASTASIS

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Background/Purpose: Robotic thyroidectomy with bilateral axillo-breast approach (BABA) is ideal for bilateral total thyroidectomy with excellent cosmetic outcomes. But incomplete lymph node dissection has been considered as a potential drawback of BABA method. Here, we described, for the first time, our initial experiences with robotic modified radical neck dissection (MRND) using BABA method and compared surgical results with open MRND.

Methods: Eighty one consecutive patients who underwent total thyroidectomy and MRND for papillary thyroid cancer between Mar. 2012 and April. 2013 were retrospectively reviewed. Clinicopathologic variables and surgical outcomes were compared between robotic group (n=11) and open group (n=70).

Results: Clinicopathologic variables compared were similar for both groups. The number of metastatic (7.8 ± 2.3) and retrieved lymph nodes (45.1 ± 17.17), stimulated thyroglobulin level (1.0 ± 0.6 ng/mL) and hospital day (6.3 ± 1.7) in robotic group revealed no statistical difference compared with those in open group. No postoperative complication, such as transient hypocalcemia, vocal cord palsy, chyle leakage, Horner's syndrome or major nerve injury, occurred in robotic group, but complication rate was not statistically different between the two groups. The operation time was longer in robotic group (385.0 ± 57.0 min) than in open group (223.3 ± 63.1) (P < 0.001).

Discussion & Conclusion: In spite of long operation time, robotic MRND with BABA seems to be technically feasible and safe procedure with excellent cosmetic results. This procedure can be considered as a possible option for selected well-differentiated thyroid cancer patients with lateral neck node metastasis.