

甲狀腺乳突癌預防性單側中央區淋巴腺切除

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Prophylactic Unilateral Central Node Dissection for cN0 Papillary Thyroid Carcinoma

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Purpose:

Prophylactic central node dissection for papillary thyroid carcinoma provides the information of lymph node status and more accurate staging. However, increased surgical complications such as hypoparathyroidism and recurrent laryngeal nerve (RLN) injury are concerned. In this retrospective study, we showed the result from a cancer center.

Materials and Methods:

Between January 2010 and December 2012, patients with papillary thyroid carcinoma diagnosed with fine needle aspiration cytology preoperatively, clinically N0 by physical examination and routine ultrasound, and no evidence of distant metastasis, were included. All the patients had thyroidectomy with unilateral central node dissection (CND). The dissection area included pre-laryngeal, unilateral para-tracheal, and pre-tracheal nodes. The age, sex, serum thyroid antibody, pathology findings such as tumor size, multiplicity, lymphovascular invasion (LVI), extra-thyroid extension (ETE), and margin status, were collected. Univariate and multivariate analysis were performed to find the significant factors related lymph node metastasis. Surgical complications were also recorded.

Results:

A total of 158 patients were included (133 were female, 25 were male), with a median age of 45 years (range 23–77 years). Total thyroidectomy was performed in 123 patients and unilateral thyroidectomy in 35 patients, in initial operation. There were 18 patients received completion total thyroidectomy later. The median tumor size was 1.3 cm (average 1.5, range 0.3-5 cm). The median number of lymph nodes harvested were 7 (average 7.7, range 1-20). Lymph nodes metastases were identified in 89 patients (56%). LVI, tumor size, age >45 years, and male sex were 4 significant factors with increased lymph node metastasis (odds ratio 3.03, 1.62, 1.05, and 3.06 respectively, by multivariate analysis). However, even in small tumors, 1 cm or less, there still were 45% central node metastasis. Permanent hypoparathyroidism after initial total thyroidectomy were identified in 6 patients (4%). RLN injury was found in 5 patients (1.7%, nerves at risk = 299), all transient.

Conclusion:

The incidence of central node metastasis in cN0 papillary thyroid carcinoma is high, even in small tumors. Further molecular study may be needed to understand the biology of

papillary thyroid carcinoma.