

## THE CLINICOPATHOLOGIC SIGNIFICANCE OF THE METASTATIC LYMPH NODE SIZE IN THYROID CARCINOMA

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**Background/Purpose:** Regional neck lymph node(LN) metastasis is known as an significant factor for predict of recurrence in thyroid carcinoma. But, The significance of the metastatic LN size has rarely been studied. Aim of this study is to identify the clinicopathologic significance of the metastatic LN size.

**Methods:** We performed a prospective collecting study of 179 patients with thyroid carcinoma after thyroidectomy with central LN dissection(CLND) or Modified radical neck node dissection(MRND) and postoperative radioactive iodine(RAI) ablation between Apr. 2012 and Dec. 2012. The patients were classified into four groups ( $\leq 0.2$ mm:group1, 0.2-2.0mm:group2, 2.0-30mm:group3,  $> 30$ mm:group4) by the metastatic LN size.

**Results:** In 179 patients (group1:7, group2:69, group3:103, group4:0), there were 48 males(26.8%) and 131 females(73.2%). And there were no statistical difference in sex ratio and mean age by the metastatic LN size. The rate of MRND and extra-thyroidal invasion were associated with metastatic LN size.

( $P < 0.001$ ) The ratio of metastatic LN to the resected LN(L/N ratio,baseline:0.4) was higher in group of large LN.( $P = 0.008$ ) The number of metastatic LN was increased in the group of larger LN size.(1-3group:  $P < 0.001$ , 2-3group:  $P < 0.001$ ) Stimulated Tg after surgery was 0.69ng/ml in group1, 1.45ng/ml in group2 and 3.47ng/ml in group3, and there was statistical difference only between group1-3.( $P = 0.003$ )

**Discussion & Conclusion:** The result shows clinicians should consider the possibility of recurrence and decide to apply RAI ablation according to metastatic LN size. And we suggest if metastatic LN size is larger than 2.0mm, the more closed observation of recurrence may be needed.