

## Identification of Lymphatic Vessel Using D2-40 in Thyroid Cancer

고려대학교 의과대학 이비인후과학교실,<sup>1)</sup> 병리과학교실,<sup>2)</sup>  
한양대학교 의과대학 이비인후과학교실<sup>3)</sup>

백승국<sup>1)</sup> · 권순영<sup>1)</sup> · 우정수<sup>1)</sup> · 정광윤<sup>1)</sup> · 채양석<sup>2)</sup> · 태 경<sup>3)</sup>

**Objective :** The regional lymph node metastases are very common findings of thyroid carcinoma. However, the mechanism of lymphatic metastasis is unknown yet because there was no specific marker which definitely distinguishes lymphatic vessels from blood vessels. The aim of this study is to identify the distribution of lymphatic vessels and their prognostic significance in thyroid malignancies.

**Materials and methods :** We investigated lymphatic vessels in 50 subjects who had previously been diagnosed with thyroid malignancy, including 29 papillary carcinomas, 10 follicular carcinomas, and 11 medullary carcinomas. Immunohistochemical staining was performed with D2-40 and CD31 monoclonal antibodies in the paraffin-embedded thyroid tissues obtained from these patients, and the association between semiquantitative score of

immunohistochemical stain and prognostic factors of thyroid cancers was investigated to evaluate a prognostic significance.

**Results :** In a majority of subjects, lymphatic vessels were located in peritumoral area. Medullary carcinoma showed more abundant peritumoral lymphatic formation than papillary and follicular carcinoma. Lymphatic vessel density of peritumoral area showed a statistically significant difference according to tumor size and lymph node metastasis.

**Conclusions :** Lymphatic vessel was more abundant in the peritumoral area and its density showed prognostic significance with positive correlation to tumor size and lymph node metastasis.