要約

Clinical significance of immunohistochemical lymphovascular evaluation to determine additional surgery after endoscopic submucosal dissection for colorectal T1 carcinoma
(大腸 T1 癌に対する内視鏡的粘膜下層剥離術後の追加手術判定における免疫染色による脈管侵襲評価の臨床的意義)

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Purpose The Japanese Society for Cancer of the Colon and Rectum (JSCCR) guidelines indicate lymphovascular invasion— evaluated by hematoxylin and eosin (HE) staining— as a surgical requirement after endoscopic submucosal dissection (ESD) in T1 colorectal carcinoma (CRC) patients; however, immunohistochemical evaluation may be superior. This study aimed to clarify the significance of immunohistochemical lymphovascular evaluation as an indicator for additional surgery of T1 CRC after ESD, and assessed the guidelines' adequacy, even when evaluating through immunostaining.

Methods Patients with T1 CRC who underwent ESD were enrolled across three institutions between January 2012 and December 2017. Immunohistochemical lymphovascular evaluation was performed. Clinicopathological features, pathological evaluations, and surgery indications were recorded. Univariate and multivariate logistic regression identified risk factors for lymph node (LN) metastasis of T1 CRC after ESD.

Results Among 370 patients with T1 CRC, recurrence, 5-year overall survival, and 5-year disease specific survival rates were 1.6%, 94.6%, and 99.5%, respectively. Six patients (1.6%) experienced recurrence, five of whom underwent additional surgery. Those with no risk factors did not exhibit recurrence. A total of 215 (58.1%) patients underwent additional surgery after ESD, 21 (9.7%) of whom exhibited LN metastasis. Among 16 patients who underwent additional surgery due to lymphovascular invasion, three (18.8%) had LN metastasis. Multivariate logistic regression analysis identified lymphatic invasion as a significant risk factor for LN metastasis (odds ratio 3.9, 95% confidence interval 1.0–14.6, P = 0.0421).

Conclusions The JSCCR guidelines have clinical validity, and immunohistochemical lymphatic evaluation findings potentially predict LN metastasis for T1 CRC after ESD.