

## 要約

Vertical tumor margin of endoscopic resection for T1 colorectal carcinoma affects the prognosis of patients undergoing additional surgery

(内視鏡切除大腸 T1b 癌の垂直断端距離と追加外科手術後の転移・再発リスクの関係)

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**Background** Vertical tumor margin-negative T1 colorectal carcinoma (CRC) is an absolute curative condition following complete endoscopic resection (ER). However, the influence on prognosis in relation to vertical tumor margin is unclear. Therefore, we evaluated the influence of the distance from vertical tumor margin to resected specimen edge (vertical margin distance) of ER for T1b (submucosal invasion depth > 1000  $\mu\text{m}$ ) CRC on the prognosis of patients undergoing additional surgery after ER.

**Methods** In total, 215 consecutive patients with T1b CRC who underwent additional surgery after ER at Hiroshima University Hospital between February 1992 and June 2019 were enrolled. We assessed 191 patients without lymph node metastases at the additional surgery. The specimens resected by ER were classified into three groups based on the vertical margin distance: patients with a vertical margin distance of  $\geq 500 \mu\text{m}$  (Group A); patients with a vertical margin distance of  $< 500 \mu\text{m}$  (Group B); and patients with a positive vertical tumor margin (Group C). Subsequently, we evaluated the prognosis of the patients in relation to the clinicopathological characteristics among the three groups.

**Results** There were no significant differences in clinicopathological characteristics among the three groups. Group A had a significantly higher recurrence-free 5-year survival rate than Groups B and C (100%, 84.5%, and 81.8%, respectively). Similarly, Group A had a significantly higher disease-specific 5-year survival rate than Group C (100% vs. 95.5%). **Conclusions** Complete en bloc resection with sufficient submucosal layer from the invasive front (vertical margin distance > 500  $\mu\text{m}$ ) by ER for T1 CRC reduces the risk of metastatic recurrence after additional surgery.