要約

Novel endoscopic ultrasonography classification for assured vertical resection margin (≥500µm) in colorectal endoscopic submucosal dissection
(大腸 ESD の深部断端（≥500µm）確保における新たな EUS 分類の提唱)

Yuki Kamigaichi, Shiro Oka, Fumiaki Tanino, Noriko Yamamoto, Hirosato Tamari, Yasutsugu Shimohara, Tomoyuki Nishimura, Katsuaki Inagaki, Yuki Okamoto, Hidenori Tanaka, Ken Yamashita, Koji Arihiro, Shinji Tanaka

Background and Aim: The risk of local recurrence might be low in pT1 colorectal carcinoma with a tumor vertical margin (VM) ≥500 µm. We investigated the relationship between endoscopic ultrasonography (EUS) findings and VM in cases with colorectal endoscopic submucosal dissection (ESD) categorized as Type 2B according to the Japan NBI Expert Team (JNET) classification.

Methods: We analyzed 179 JNET Type 2B colorectal tumors resected by ESD at Hiroshima University Hospital from January 2010 to May 2021. The distance from the tumor invasive front to the muscle layer on EUS was defined as the tumor-free distance (EUS-TFD) and classified as Type I (EUS-TFD ≥1 mm) and II (<1 mm). We investigated the relationship between EUS-TFD and VM, and analyzed the predictive factors for VM ≥500 µm.

Results: EUS-TFD Type I was diagnosed in 133 (74.3%) lesions: VM ≥500 µm (114, 85.7%); VM <500 µm (19, 14.3%); and VM positive (VM1) (0, 0%). Type II was diagnosed in 46 (25.7%) lesions: VM ≥500 µm (14, 30.5%); VM<500 µm (22, 47.8%); and VM1 (10, 21.7%). In the EUS-TFD Type I cases, 84.5% and 87.8% were protruded and superficial types; whereas for Type II cases, these were 38.9% and 25%, respectively. EUS-TFD classification (Type I), scope operability (good), submucosal invasion depth (<2000 µm), histology at the deepest invasive portion (favorable), and degree of fibrosis (F0/F1) were significant predictors of VM ≥500 µm.

Conclusions: In JNET Type 2B lesions, EUS-TFD classification is a novel diagnostic indicator to predict VM ≥500 µm in ESD preoperatively.