

Kitagawa, Y., Ikebe, D., Suzuki, T., Hara, T., Itami, M., & Yamaguchi, T. (2017). **Frequent Presence of Lymphovascular Invasion in Small Rectal Neuroendocrine Tumors on Immunohistochemical Analysis.** *Digestion*, 95(1), 16–21. <https://doi.org/10.1159/000452357>

## **Abstract**

### **Objective**

Review of presence of lymphovascular invasion in small rectal neuroendocrine tumours on immunohistochemical analysis

### **Findings**

Rectal neuroendocrine tumors (RNETs) have become common in recent years and are good candidates for endoscopic resection (ER). To achieve clear resection margins, more advanced techniques such as endoscopic submucosal dissection, endoscopic submucosal resection with a ligation device, and cap-assisted endoscopic mucosal resection are available for ER. After ER, lymphovascular invasion (LVI) is regarded as an important predictor of nodal metastasis. Previous studies have shown that small RNETs with LVI were uncommon (0-8.3%). However, using immunohistochemical analysis, a recent study revealed the frequent occurrence of LVI in small RNETs in a systematic manner (46.7%). There is a possibility that the actual detection rate of LVI in small RNETs is not always evaluated accurately because of the limited detection sensitivity of conventional hematoxylin-eosin staining.

### **Conclusions**

A recent study has demonstrated the frequent presence of LVI even in small RNETs using D2-40 and EVG staining. The correlation between LVI detected using immunohistochemical analysis and the development of metastasis remains unclear. Additional prospective studies are required to clarify the role of LVIs detected using immunohistochemical analysis.