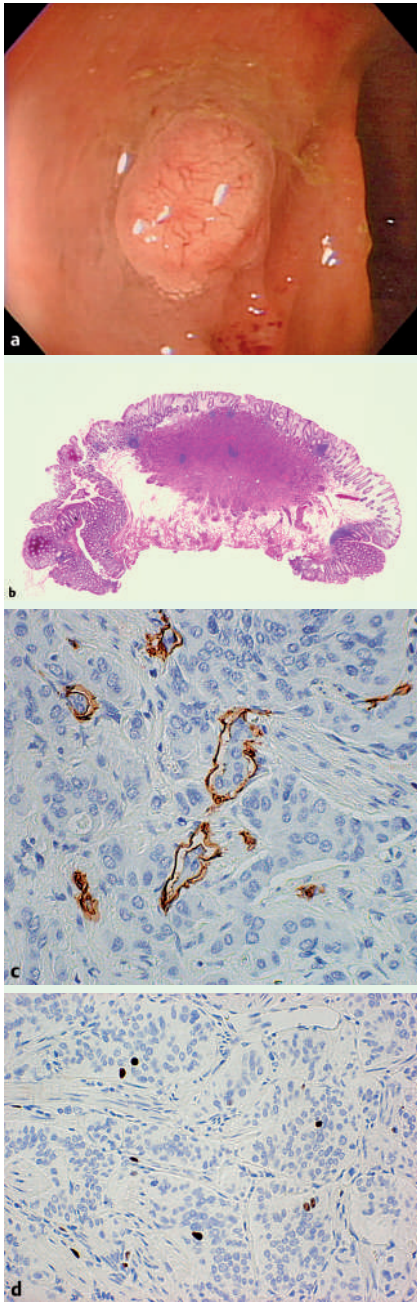
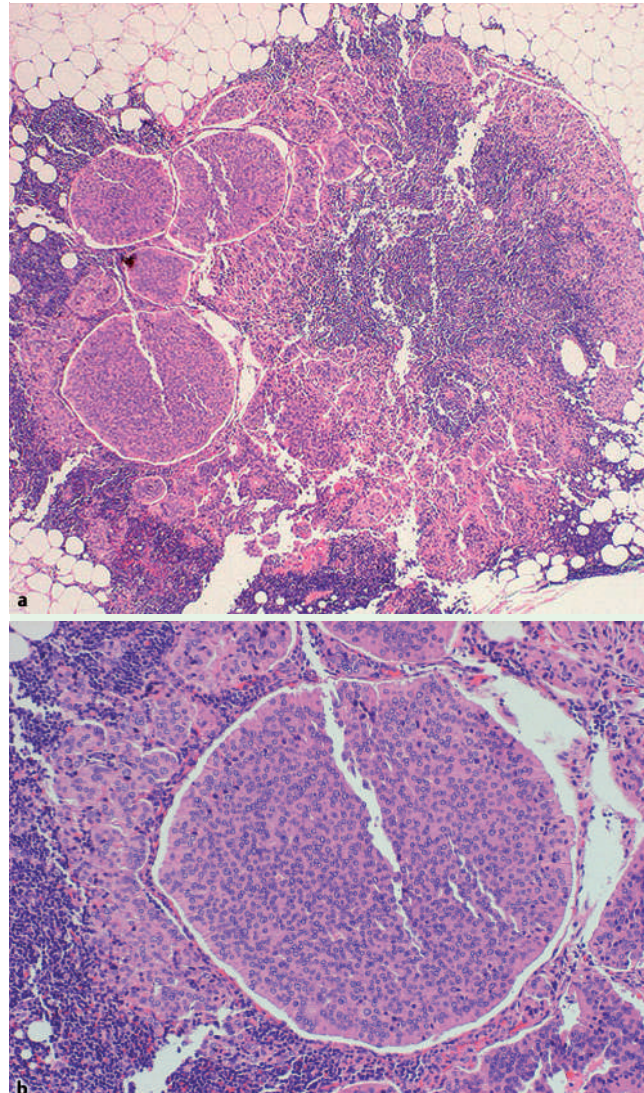


## Rectal carcinoid tumor, 6 mm in diameter, with lymph node metastases



**Fig. 1** **a** Colonoscopy revealed a hemispheric submucosal tumor in the lower rectum. **b** The resected specimen revealed that the carcinoid was confined to the submucosa, and the surgical margin was negative. **c** Lymphatic permeation was confirmed by D2-40 immunohistochemistry ( $\times 100$ ). **d** The Ki-67 labeling index was raised at 1.66 ( $\times 100$ ).



**Fig. 2** The lymph node dissected in an additional operation revealed metastasis of the carcinoid.

A 60-year-old man was referred to our hospital because of a positive fecal occult blood test. Colonoscopy revealed a hemispheric submucosal tumor, 8 mm in diameter, at the lower rectum (● Fig. 1a). There was neither a central depression nor ulceration on the lesion. The pathological diagnosis of the biopsy specimen was carcinoid tumor. Abdominal CT detected no liver or lymph node metastasis. The lesion was diagnosed as a rectal carcinoid tumor confined to the submucosal layer, and therefore endoscopic submucosal resection with a ligating device (ESMR-L) [1] was performed.

The pathological diagnosis of the endoscopically resected specimen was a rectal carcinoid tumor, 6 mm in diameter, invading the submucosa by 2900  $\mu\text{m}$  from the surface (● Fig. 1b). The surgical margin was negative. However, lymphatic permeation was confirmed by D2-40 immunohistochemistry (● Fig. 1c), and the Ki-67 labeling index (● Fig. 1d) was increased to 1.66. Therefore, the patient underwent low anterior resection of the rectum. There was no residual tumor in the rectal wall, but two out of seven regional lymph nodes revealed metastasis of the carcinoid (● Fig. 2).

Small rectal carcinoids confined to the submucosal layer can be resected by endoscopic resection. However, in an analysis of 1914 reported cases of rectal submucosal carcinoids measuring less than 10 mm, Soga reported a metastasis rate of 9.8% [2]. In the present case, the patient underwent an additional operation because there were pathological features of metastasizing carcinoids, such as lymphatic permeation and the increased Ki-67 labeling index ( $>1.5$ ) [3], and there were multiple lymph node metastases. Therefore, it is important to evaluate the histopathological risk factors of lymph node metastasis on the basis of the endoscopically resected specimen.

Endoscopy\_UCTN\_Code\_CCL\_1AD\_2AC

### T. Shinohara, K. Hotta, T. Oyama

Department of Gastroenterology, Saku Central Hospital, Nagano, Japan

### References

- 1 Ono A, Fujii T, Saito Y *et al*. Endoscopic submucosal resection of rectal carcinoid tumors with a ligation device. *Gastrointest Endosc* 2003; 57: 583 – 587
- 2 Soga J. Early-stage carcinoids of the gastrointestinal tract: an analysis of 1914 reported cases. *Cancer* 2005; 103: 1587 – 1595
- 3 Hotta K, Shimoda T, Nakanishi Y *et al*. Usefulness of Ki-67 for predicting the metastatic potential of rectal carcinoids. *Pathol Int* 2006; 56: 591 – 596

### Bibliography

DOI 10.1055/s-2007-966849  
 Endoscopy 2008; 40: E40 – E41  
 © Georg Thieme Verlag KG Stuttgart · New York ·  
 ISSN 0013-726X

### Corresponding author

#### T. Shinohara, MD

Musashidai 2-9-2  
 Fuchu City  
 Tokyo, Japan  
 Fuchu  
 Tokyo  
 Japan 183-0042  
 Fax: +81-42-3270298  
 sino@tama-cdc.jp