Rectal carcinoid tumor: a delayed localized recurrence 23 years after endoscopic resection

Fig. 1 Low power histologic image showing polygonal cells forming chords and small nests with intervening stroma consistent with carcinoid with trabecular growth pattern (H&E; original magnification: $\times 100$).

Fig. 3 Low power histologic image showing small chords of polygonal cells, consistent with recurrence of carcinoid tumor (H&E; original magnification: $\times 100$).

Fig. 4 High power histologic image consistent with recurrence of carcinoid tumor (H&E; original magnification: $\times 200$).

Fig. 2 Endoscopic image of rectum showing prior polypectomy scar with raised area.

Rectal carcinoid tumors are rare representing approximately 2% of rectal malignancies [1]. While treatment approaches vary and can include endoscopic or surgical resection, small (<1 cm) carcinoid tumors have extremely low rates of local recurrence and metastasis [1–3]. Our case is the first describing a delayed recurrence of rectal carcinoid tumor more than 20 years after initial endoscopic resection. A 67-year-old man presented for surveillance colonoscopy with a history of rectal carcinoid tumor. He had undergone endoscopic resection of a 4 mm rectal carcinoid tumor 5 cm from the anal verge 23 years earlier (● Fig. 1). Three surveillance colonoscopies since resection were negative for residual carcinoid tissue. Recent colonoscopy showed a scar in the rectum with a 5-mm raised area (● Fig. 2), which was resected via snare cautery polypectomy. Pathology was consistent with rectal carcinoid tumor (● Fig. 3 and ● Fig. 4). Immunohistochemical stain for synaptophysin was positive; chromogranin was negative (● Fig. 5). Less than 1% of cells stained positive for Ki-67, indicative of a low proliferative rate and metastatic potential (● Fig. 6) [4]. Flexible sigmoidoscopy 3 months later showed no recurrence.

Rectal carcinoids are well-differentiated hindgut neuroendocrine tumors and are the most common location for colorectal carcinoids [1–3, 5]. Hindgut tumors typically display a trabecular growth pattern whereas midgut tumors usually show a nested pattern [5]. As in our case, the majority are found incidentally during endoscopic screening [1–3]. Lesions less

Fig. 5 Immunohistochemical staining for synaptophysin was positive, demonstrated by diffuse red staining in cytoplasm (original magnification: $\times 100$).

Fig. 6 Staining with Ki-67 showing that less than 1% of tumor cells stained positive (red/brown dots represent nuclear staining for proliferation marker Ki-67) (H&E; original magnification: $\times 1$).

than 1 cm have very low rates of metastasis and local recurrence, and endoscopic resection via polypectomy or endoscopic mucosal resection is appropriate [1–3]. Our case demonstrates that delayed recurrence of rectal carcinoid tumors can occur decades later in lesions with low mitotic rates and also highlights the importance of vigilantly assessing and sampling the scar site for suspicious tissue via biopsy or polypectomy, even years after resection.

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Competing interests: None

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References

- 1 Kwaan M, Goldberg J, Bleday R. Rectal carcinoid tumors: review of results after endoscopic and surgical therapy. *Arch Surg* 2008; 143: 471–475
- 2 Jetmore AB, Ray JE, Bathright JB Jr et al. Rectal carcinoids: the most frequent carcinoid tumor. *Dis Colon Rectum* 1992; 35: 717–725
- 3 Huang Y-J, Wang J-H, King T-M et al. Rectal carcinoid tumor: treatment and long-term outcome in 30 cases. *J Soc Colon Rectal Surgeon (Taiwan)* 2011; 22: 72–78
- 4 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
- 5 Odze RD, Goldblum JR. *Surgical pathology of the GI tract, liver, biliary tract, and pancreas*. 2nd ed. Philadelphia: Elsevier; 2009

Bibliography

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