Extensive hyperplastic recurrence after complete R0 resection by endoscopic submucosal dissection of a gastric hyperplastic polyp with dysplasia

Endoscopic submucosal dissection (ESD) is an effective, safe technique for treating gastric lesions [1]. Hyperplastic polyps have an underestimated risk for malignancy, which has been reported to be 3.7 % in 809 lesions measuring more than 1 cm [2]. Thus, complete en bloc resection with ESD is an option to avoid local recurrence [3], particularly when hyperplasia is associated with dysplasia.

We report the case of a 68-year-old man who underwent a complete R0 resection by ESD of a 2-cm hyperplastic polyp with low grade dysplasia that was located on the posterior wall of the antrum (**Fig. 1**). The specimen was 6 cm in size, with large safety margins (**Fig. 2**). Follow-up endoscopy 3 months later revealed good scarring without any local recurrence histologically. Biopsy revealed antral atrophic gastritis and intestinal metaplasia.

At 1-year follow-up, extensive recurrence had appeared on the whole posterior wall of the antrum that measured more than 8 cm and crossed the pylorus (**Fig. 3**, **Fig. 4**). We attempted a new ESD procedure, but severe fibrosis prevented submucosal access. To differentiate recurrence from a profuse scarring process, we performed a snare resection of a 25-mm fragment, which confirmed hyperplasia without dysplasia, in addition to granulation scarring tissue. Such recurrence has previously been described after surgery, but never after endoscopic resection [4]. Because of the significant size of the lesion, the fibrosis, and the potential for malignancy, surgery was scheduled.

Various risk factors for hyperplastic gastric polyps have been proposed, such as chronic active gastritis and concomitant Helicobacter pylori infection [5]. In our patient, earlier biopsies never revealed such an infection, but he had a long history of proton pump inhibitor use.

To summarize, we report a profuse recurrence of hyperplasia after curative en bloc ESD of a hyperplastic polyp with low grade dysplasia. This uncommon evolution might be linked to the large area of resection by ESD, which led to a significant scarring process. Long-term follow-up appears to be justified in patients who undergo resections of this type.

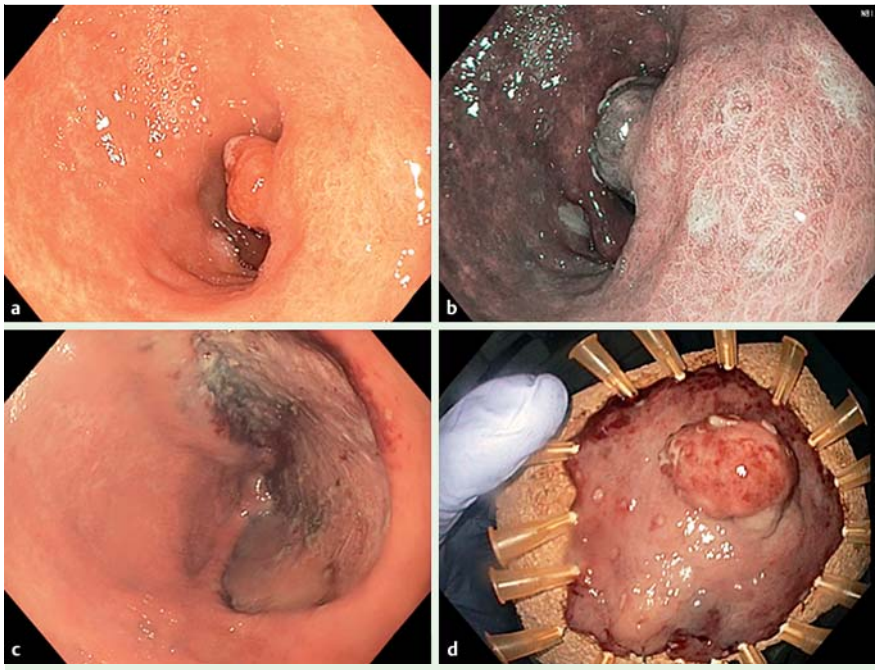

Fig. 1 Endoscopic submucosal dissection (ESD) of a hyperplastic polyp with low grade dysplasia located on the posterior wall of the antrum in a 68-year-old man. **a** White light imaging of the lesion. **b** Virtual chromoendoscopy with narrow-band imaging. **c** Resection bed after ESD. **d** Specimen with large free margins.

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Competing interests: None

Bérénice Petit[1], Jérôme Rivory[1,2], Isabelle Lienhart[1], Adriane Lesne[1,3], Valérie Hervieu[3], Thierry Ponchon[1,2], Mathieu Pioche[1,2]

[1] Gastroenterology and endoscopy unit, Pavillon L1, Edouard Herriot Hospital, Lyon, France
[2] Inserm U1032, LAbTau, Lyon, France
[3] Department of Digestive Pathology, Edouard Herriot Hospital, Lyon, France

References

1 *Chung I-K, Lee JH, Lee S-H* et al. Therapeutic outcomes in 1000 cases of endoscopic submucosal dissection for early gastric neoplasms: Korean ESD Study Group multicenter study. Gastrointest Endosc 2009; 69: 1228 – 1235
2 *Ahn JY, Son DH, Choi KD* et al. Neoplasms arising in large gastric hyperplastic polyps: endoscopic and pathologic features. Gastrointest Endosc 2014; 80: 1005 – 1013.e2
3 *Jung E-Y, Choi S-O, Cho KB* et al. Successful endoscopic submucosal dissection of a giant polyp in a 21-month-old female. World J Gastroenterol 2014; 20: 323 – 325
4 *Joffe N, Goldman H, Antonioli DA*. Recurring hyperplastic gastric polyps following subtotal gastrectomy. AJR Am J Roentgenol 1978; 130: 301 – 305
5 *Hongo M, Fujimoto K*. Gastric Polyps Study Group. Incidence and risk factor of fundic gland polyp and hyperplastic polyp in long-term proton pump inhibitor therapy: a prospective study in Japan. J Gastroenterol 2010; 45: 618 – 624

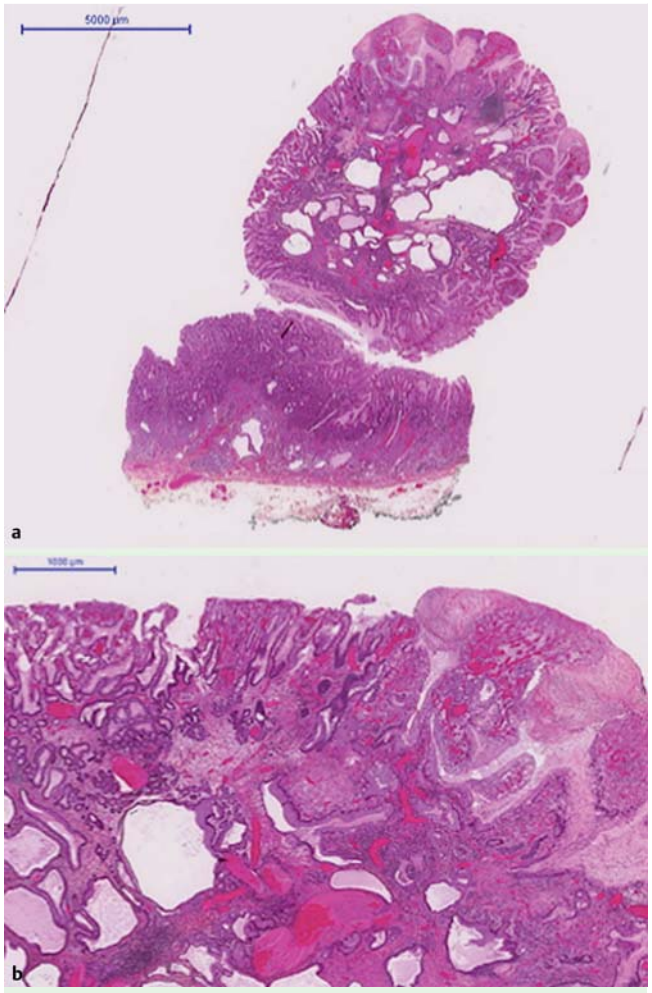

Fig. 2 Histology of the initial endoscopic resection in 2013. **a** Hyperplastic peduncular polyp with low grade dysplasia. **b** Proliferation of surface foveolar cells, which are elongated and tortuous.

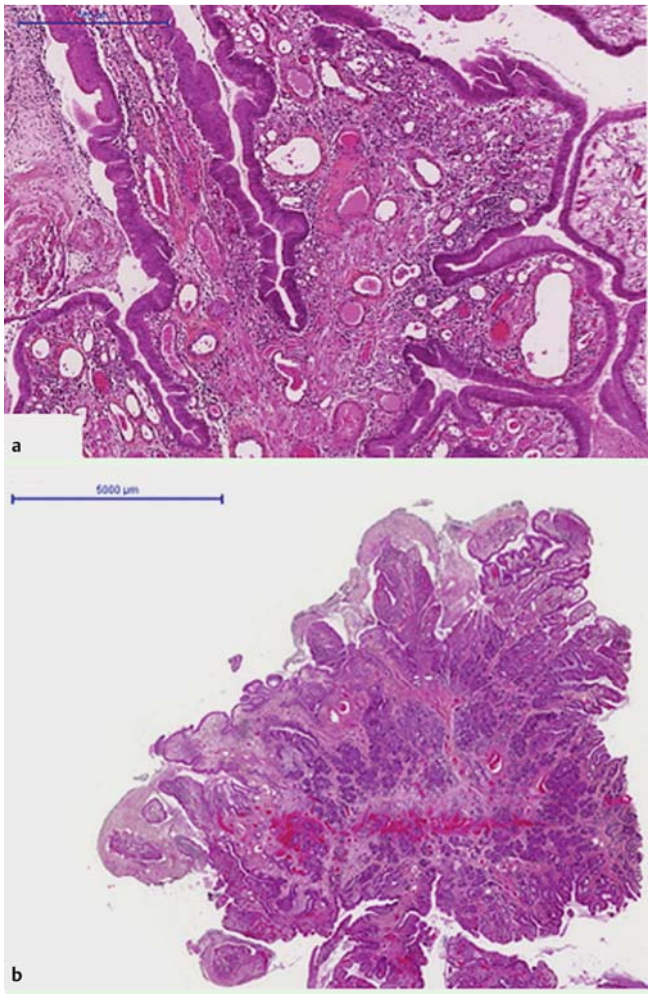

Fig. 4 Recurrence histology. **a** Diffuse recurrence with both a scarring granulation process and hyperplastic tissue. **b** Same aspect with low magnification.

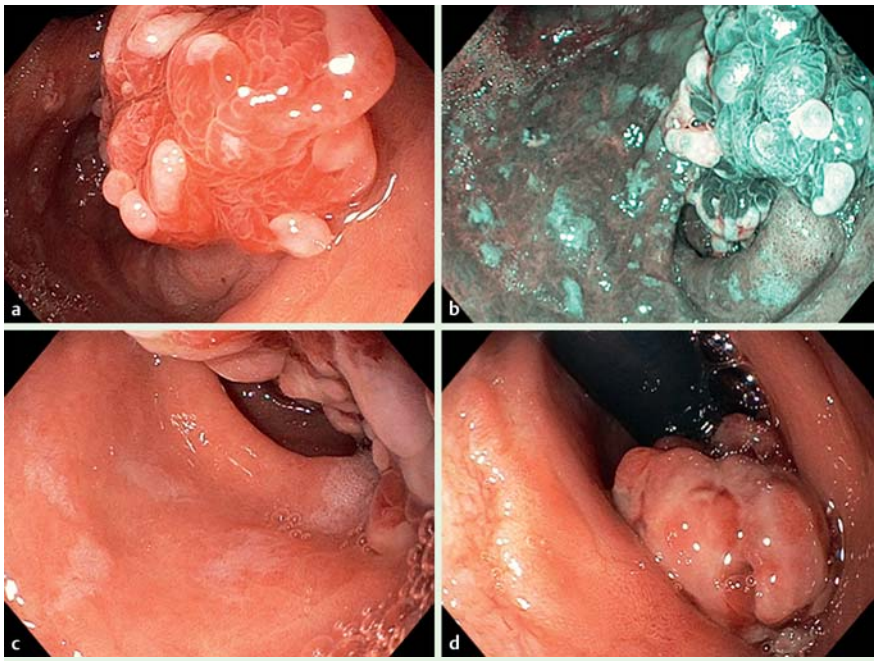

Fig. 3 Endoscopic examination for the recurrence of hyperplasia. **a** Proximal margin at the level of the angulus on white light imaging. **b** Proximal margin at the level of the angulus on narrow-band imaging. **c** Middle view in the antrum. **d** Retroflexion view in the duodenum, with the lesion extending across the pylorus.

Bibliography
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Corresponding author
Mathieu Pioche, MD
Endoscopy unit – Digestive Disease Department
Pavillon L1
Edouard Herriot Hospital
69437 Lyon Cedex
France
Fax: +33-4-72-11-01-47
mathieu.pioche@chu-lyon.fr