Osseous metaplasia in a gastric adenomatous polyp

Fig. 1 a, b Areas of surface ulceration with granulation tissue and several foci of heterotopic bone formation in an adenomatous polyp of the stomach in a 71-year-old man with epigastric pain and dyspeptic syndrome.

Heterotopic bone is rarely found in the gastrointestinal tract. In the majority of reported cases, it was associated with malignant lesions [1,2], Peutz–Jeghers syndrome [3], and more rarely with inflammatory colonic polyps [4]. On reviewing the literature, we found only two cases of metaplastic bone accompanying hyperplastic gastric mucosa [5,6], and no case report of osseous metaplasia in gastric adenoma of the stomach.

We report a case of a 71-year-old man who presented to our clinic with a history of epigastric pain and dyspeptic syndrome for the past 2 months. He had ulcerative colitis and had been on treatment with salicylates for a long time; he also had chronic hepatitis C. Because of these symptoms, we conducted upper gastrointestinal endoscopy, which revealed a pedunculated polyp in the antrum. The

polyp was excised, retrieved, and sent for histological examination. Histologically, the specimen demonstrated an adenomatous polyp with areas of surface ulceration, granulation tissue, and several foci of heterotopic bone formation (● Fig. 1). The pathogenesis of osseous metaplasia in the gastrointestinal tract remains poorly understood. It may be that either local or unknown osteogenic factors secreted by the lesion stimulate the osteoblasts, or that the osteogenic stimulation may be a result of inflammation. The finding of bone metaplasia seems to have no clinical significance.

In conclusion, osseous metaplasia in gastric adenoma is an extremely rare phenomenon in which the mechanism responsible for the osseous histogenesis is as yet not known.

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