

## An Interesting Case of Early Multifocal Gastric Cancer

Onur Keskin, Necati Ormeci

### ABSTRACT

Early gastric cancer (EGC) is defined as gastric cancer confined to mucosa or submucosa, regardless of the presence or absence of lymph node metastasis. Generally, patients with multifocal EGC have two or three lesions but rarely have more than three lesions. In this article, we present a patient who was admitted to the hospital with complaints of epigastric pain and fatigue. His endoscopic examination revealed four EGC lesions. We performed endoscopic mucosectomy for all lesions successfully. Endoscopic mucosal resection is an organ conservative approach and can be performed to patients with early multifocal gastric cancer. During this procedure life-threatening severe complications can occur. In our experience, severe bleeding occurred during mucosectomy and our patient underwent subtotal gastrectomy.

**Abbreviation:** EGC: Early gastric cancer.

**Keywords:** Early gastric cancer, Multifocal, Endoscopic mucosal resection, Complications.

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### INTRODUCTION

Early gastric cancer (EGC) is defined as gastric cancer confined to mucosa or submucosa, regardless of the presence or absence of lymph node metastasis. The diagnosis and recognition of EGC has been increasing with a favorable prognosis (5-year survival rate of over 90% following surgery).<sup>1</sup>

Multiple gastric cancer is not a rare condition. Multifocal gastric carcinoma was reported with an incidence of 5.1% and more than half of multifocal gastric carcinomas were at an early stage. Generally, patients with multifocal gastric cancer have two or three lesions but rarely have more than three lesions.<sup>2</sup> As compared to advanced cancer, higher incidence of multifocal lesions in EGC have been demonstrated.<sup>3,4</sup>

An inverse correlation is found between tumor size and multifocality. Most patients with multifocal early gastric cancer, size of their lesions frequently is less than 10 mm in their greatest diameter. Nearly 20 to 30% of accessory lesions are likely to be missed in preoperative assessments.<sup>5</sup>

Macroscopically, multifocal carcinomas often are flat and small, rarely infiltrating submucosa; and mostly both primary and secondary lesions were of the same histologic type. No significant difference in postoperative survival was

demonstrated between patients with multifocal EGC and solitary EGC.<sup>2</sup>

Multifocal gastric carcinoma is more frequent when patients are older and tumors are small and early. Therefore, lesions are likely to be missed in preoperative or intraoperative diagnostic assessment. In such cases, entire stomach should be examined by particular care before and during the operation, especially when local or endoscopic resection of the tumor is to be performed. In this article, we present a patient with four EGCs, type I, who had severe hemorrhage during endoscopic polypectomy.

### CASE REPORT

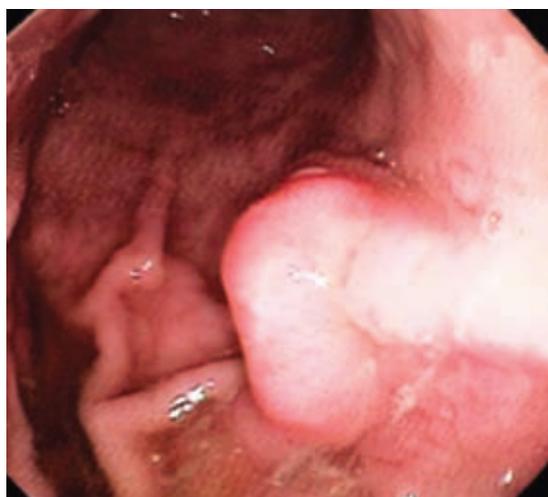
An 80-year-old man was admitted to the hospital with complaints of epigastric pain, fatigue and weakness. He had no history of bleeding, weight loss, nausea and vomiting. There were no abnormal findings on physical examination.

In his endoscopic examination, there was a long segment Barrett esophagitis between 38 and 42th cm of esophagus. Besides that there were also multifocal tumoral lesions located at proximal and anterior part of corpus 4 cm in diameter, proximal and posterior wall of corpus, 3 cm in diameter, at distal part of corpus greater curvature side 8 mm in diameter, posterior wall of corpus 10 mm in diameter (Figs 1A to C). These lesions were soft, sessile and had villous type polypoid characteristics. There were no ulcerated lesions, erosions or active scars in the stomach.

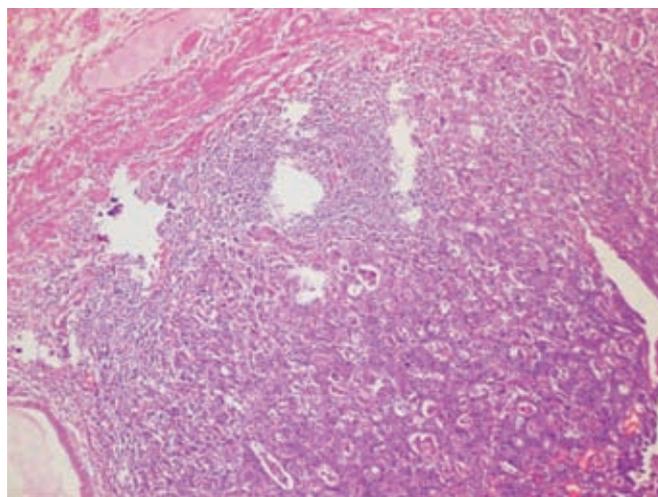
Endoscopic biopsies taken from those lesions revealed early gastric adenocarcinoma invaded to mucosa. The patient persistently refused to have surgical operation for



**Fig. 1A:** Two polypoid lesions at proximal and anterior part of corpus—4 cm in diameter, proximal and posterior wall of corpus—3 cm in diameter



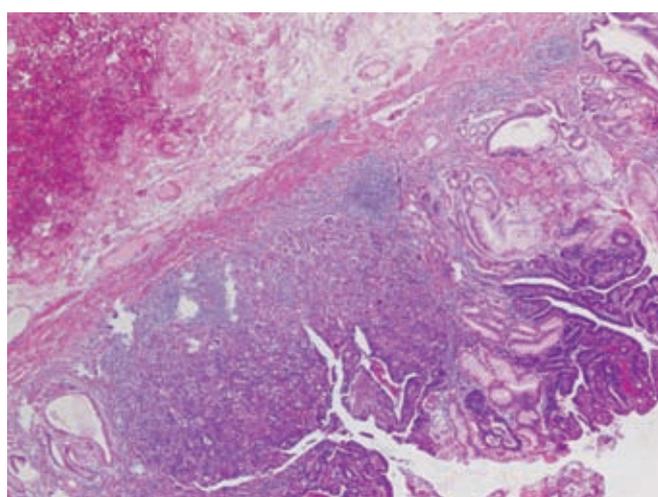
**Fig. 1B:** A polypoid lesion located at the posterior wall of corpus—10 mm in diameter



**Fig. 2A:** Early gastric cancer which is confined to mucosa and associated with an adenomatous polyp. This low microscopic power view also shows areas of intestinal metaplasia and atrophic gastritis



**Fig. 1C:** An elevated lesion located at distal part of corpus greater curvature side—8 mm in diameter



**Fig. 2B:** Early gastric cancer which is associated with tubulovillous adenoma

gastric cancer. Endoscopic resection was performed for all lesions. Three of them were successfully resected but just after resection of fourth lesion, which was located at the proximal corpus of anterior wall and 4 cm in diameter, severe arterial bleeding occurred at the base of polyp in three different focus. Although we have used argon laser coagulator, the patient had shock in a few minutes. The patient underwent emergency subtotal gastrectomy. Pathologic examination of the gastrectomy material revealed lesions concordant with multifocal intramucosal early gastric cancer without lymph node metastasis (Figs 2A and B).

Fortunately he had no complication during operation had no serious problem in postoperative period.

## DISCUSSION

Because early multifocal gastric cancer is not a rare condition, we must evaluate all mucosal surfaces and be very careful for presence of other lesions during endoscopic

examination. EGC can be treated endoscopically.<sup>6</sup> Endoscopic mucosectomy can also be performed to multifocal cancers but severe complications can occur during endoscopic mucosal resection procedures. Bleeding was reported in 1 to 20% in different studies<sup>7</sup> and incidence of perforation was detected in 1.2% in a Japanese study.<sup>8</sup> These complications can also be successfully treated endoscopically. Advancements in endoscopic technologies provided us not only to diagnose stomach cancer in early stage but also to notice early recurrence. According to the literature the patients who have mucosal cancer, well-differentiated adenocarcinoma, less than 2 cm in diameter and without lymph node metastasis have favorable prognosis without recurrences.<sup>8</sup>

For this patient, we performed endoscopic resection for all lesions successfully. But after resection of fourth lesion, severe arterial bleeding occurred. Finally, patient underwent emergent subtotal gastrectomy.

## CONCLUSION

We should give efforts for the diagnosis of stomach cancer in early stages. We must be aware of multifocal stomach cancer during endoscopic examination. Because this approach is organ conservative, endoscopic mucosectomy should be preferred.

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