



## Case Report

# Early Gastric Carcinoma: A Rare Variant of a Common Entity

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### ABSTRACT

Gastric Carcinoma is the leading cause of cancer death worldwide. Gastric cancer confined to the mucosa and submucosa is regarded as early gastric cancer due to its overall favourable prognosis. Although common in Japan, early gastric cancer is an infrequent occurrence in India. Endoscopist should be more suspicious about these lesions as these can be easily neglected.

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## Introduction

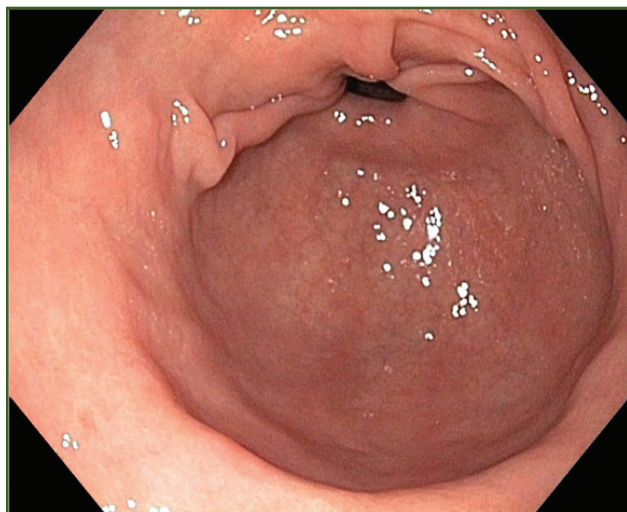
Gastric Carcinoma is the fifth most common cause of cancer death worldwide.<sup>1</sup>

Treatment results are favourable when the disease is detected in its early stage. Gastric cancer confined to the mucosa and submucosa is regarded as 'early' gastric cancer (EGC) due to its overall favourable prognosis. Although common in Japan due to their aggressive surveillance, EGC is infrequently diagnosed in India. Its important to recognise these lesions on endoscopic biopsies as they have good prognosis as compared to more common types of gastric adenocarcinoma.

## Case Report

A 68 year old male presented with complaint of black tarry stools for two months duration. Upper GI Endoscopy revealed an ulcer in the antrum measuring about 1 cm diameter with thickened folds in the lesser curvature (Figure-1,2). Histopathology of the endoscopic biopsy revealed a moderately differentiated adenocarcinoma. Patient underwent distal radical gastrectomy with perigastric lymphadenectomy. On gross examination, anterior wall and lesser curvature showed a flat rough lesion measuring 1.5 X 1.4cm with loss of rugae in the antrum.

Histopathological examination showed a well differentiated adenocarcinoma, superficial spreading type infiltrating upto muscularis mucosae with desmoplasia and chronic inflammation and no involvement of perigastric lymph nodes. Features were consistent with early gastric carcinoma. (Figure 3,4). Pathological stage (pT1b N0 MO)

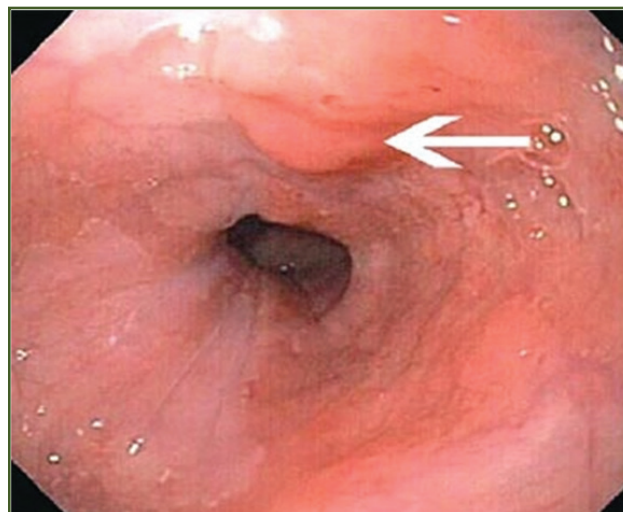


## Discussion

Early Gastric Carcinoma was originally used in the Japanese literature to describe infiltrating adenocarcinomas in which the primary growth is confined to the mucosa or submucosa of the stomach regardless of regional lymph nodes status. It is more common in males. Most tumors are less than 2cm and are seen in distal stomach mostly along the lesser curvature.<sup>2</sup> EGC has to be differentiated from carcinoma in situ or gastric dysplasia- conditions in which tumor cells have not penetrated the basement membrane and have no metastatic potential. Rarely cases of EGC may have isolated regional lymph nodes metastasis or even hepatic metastases, but most cases are still potentially curable by surgery. A subclassification based on gross appearances of EGC was devised by the Japanese Gastroenterological Endoscopy Society. Lesions are categorised as Type I protruded, Type II (superficial type): IIa – elevated, Type IIb – flat, Type IIc- depressed, Type III- excavated.<sup>3</sup> In our case the EGC was type IIb lesion. (Figure 5).

The importance of correctly identifying EGC lies in the excellent results of interventional treatment. For the intramucosal cancer, the cure rate is quoted as 93% when no regional lymph nodes metastasis are present and 91% when they are present. For early cancers with submucosal involvement, the overall cure rate is 89% which decreases to 80% in cases with lymph node metastasis.<sup>2</sup>

A study in series of 10,000 consecutive cases in Japan, the 5-year survival rates were 46% for advanced carcinoma and 89% for early carcinoma.<sup>4</sup>



**Fig.1,2: Upper GI endoscopy show linear ulcer with everted margins in antrum .**

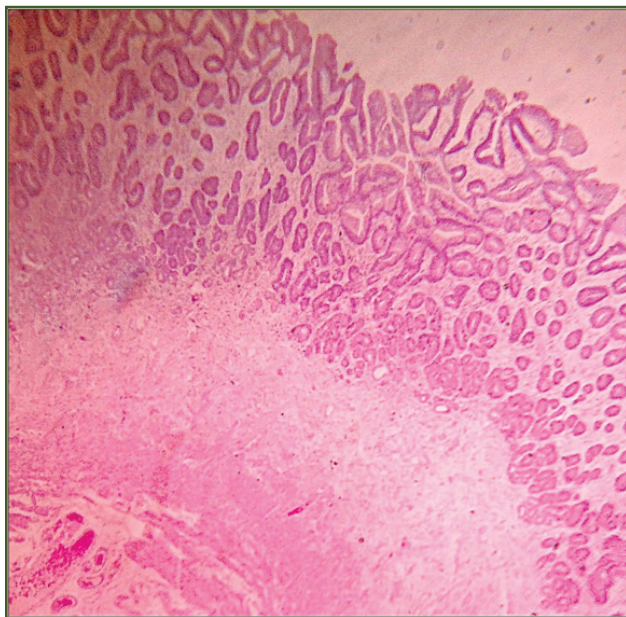


Fig. 3 : Photomicrograph of section from stomach shows a well differentiated adenocarcinoma infiltrating upto muscularis mucosa. (H&E, 4x)

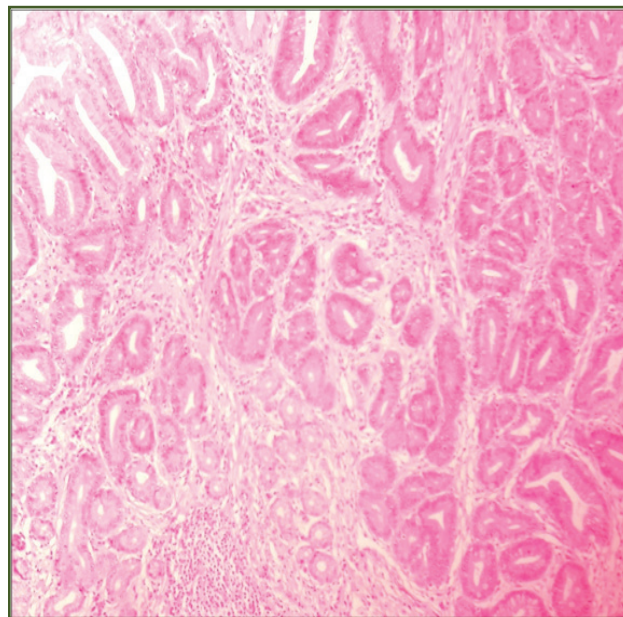


Fig. 4 : Photomicrograph of section from stomach shows a well differentiated adenocarcinoma with desmoplasia and chronic inflammation. (H&E, 10x)

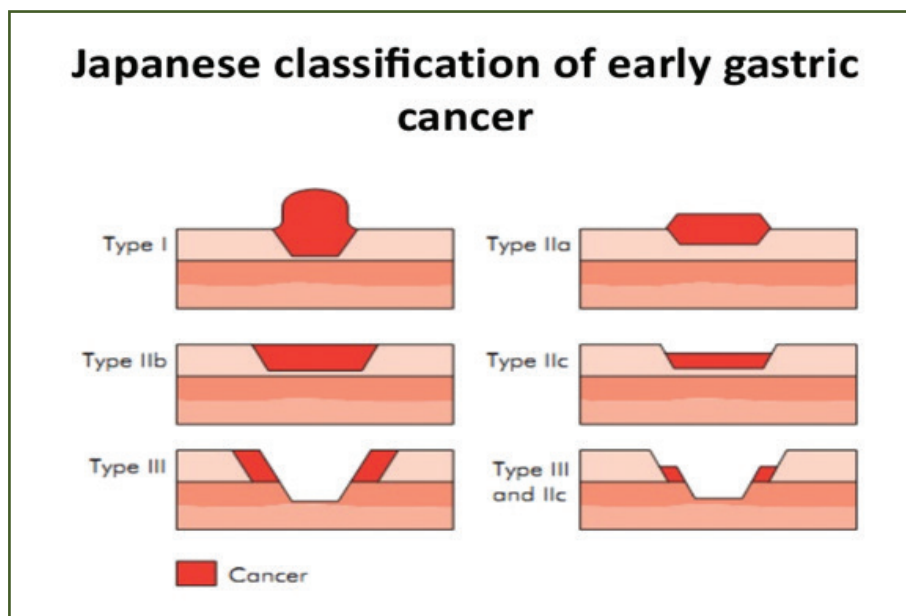


Fig. 5 : Japanese Gastroenterological Endoscopy Society. Lesions are categorised as Type I protruded , Type II (superficial type) : IIa – elevated , Type IIb –flat, Type IIc- depressed , Type III- excavated.

Early gastric cancers are very amenable to interventional endoscopy. Both endoscopic mucosal resection (EMR) and endoscopic submucosal dissection (ESD) have resulted in successful endoscopic resections of lesions.<sup>5,6</sup>

### Conclusion

The endoscopist must be more suspicious with these lesions that can be easily ignored and multiple sites of biopsies should be taken for correct assessment of the tumor depth since EGC and advanced gastric carcinoma has completely different survival rate, treatment modality and prognosis.

In conclusion, endoscopic resection of EGC is well established as a standard therapy in Japan and is increasingly becoming accepted and regularly used in other countries.

The indications, pathological assessment, and techniques of endoscopic resection employed in the treatment of EGC are demanding

### Funding Source

None

### Conflict of Interest

None

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