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EC GASTROENTEROLOGY AND DIGESTIVE SYSTEM

Case report

Carcinoma Stomach- A Continuum of Histopathological Changes

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Abstract

We present to you a 70 year old lady presented with history of intermittent non bilious vomiting and weight loss since six months. CT abdomen and endoscopy revealed circumferential thickening of pylorus. Biopsy of lesion revealed poorly differentiated adenocarcinoma. She underwent D2 gastrectomy. Her histopathological report showed a continuum of changes from chronic gastritis to carcinoma stomach, with all this changes seen as continuum in 1 slide. Presence of all changes ranging from chronic gastritis to Invasive cancer to be seen in 1 slide is rare.

Keywords: *Atrophic gastritis; Intestinal metaplasia; Dysplasia; Invasive carcinoma*

Introduction

Gastric cancer is the fourth most commonly diagnosed cancer and second most common cause of cancer-related deaths. Carcinoma stomach has various known etiological factors. Chronic atrophic gastritis is a known condition which can develop into carcinoma. Chronic gastritis over a period of years develops into intestinal metaplasia which progresses to dysplastic changes and further leading to carcinomatous changes. But presence of all these changes in one pathological cut section in not so well known phenomenon with very few reports of the same in literature.

Case History

A 70 year old lady presented with history of intermittent non bilious vomiting and weight loss since six months. CT abdomen and endoscopy revealed circumferential thickening of pylorus. Biopsy of lesion revealed poorly differentiated adenocarcinoma. She underwent D2 gastrectomy. Post operatively she recovered well.

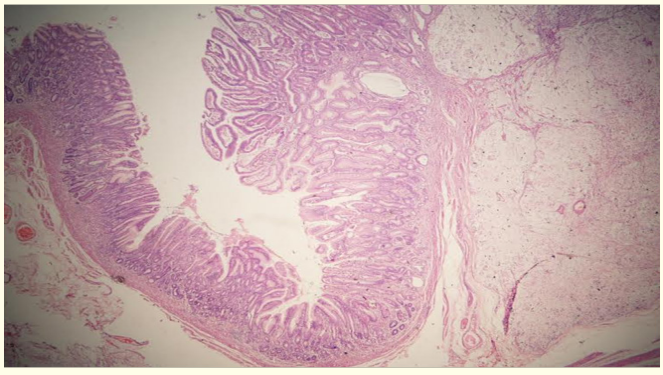

Figure 1*: Low power image of stomach, showing changes ranging from chronic gastritis, intestinal metaplasia, dysplastic adenomatous changes and intestinal type of enocarcinoma of stomach.*

Her histopathological examination report showed high grade signet ring cell carcinoma of stomach arising in the background of chronic gastritis, intestinal metaplasia, dysplasia and well differentiated adenocarcinoma of gastric pyloric mucosa (figure 1 and 2a,2b). All these changes were seen in one pathological cut section as a continuum.

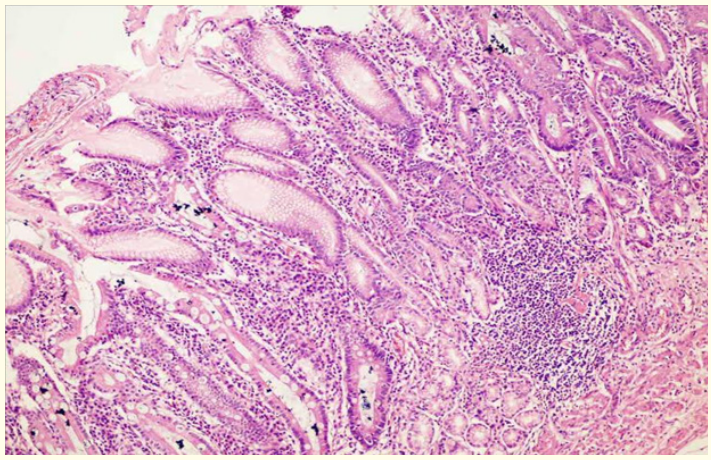

Figure 2a (magnified view of figure 1)*: Shows microscopic changes of chronic gastritis and intestinal metaplasia. White arrow denoting changes of chronic gastritis and black arrow denoting intestinal metaplasia with goblets cells.*

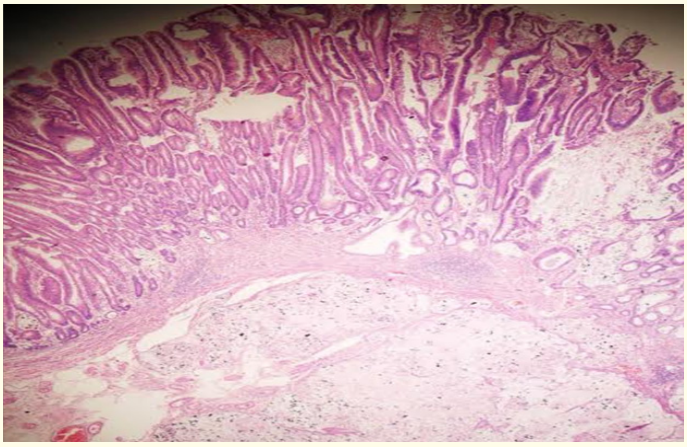

Figure 2b (magnified view of figure 1): *Shows microscopic changes of dysplastic adenomatous polyp and intestinal type of carcinoma stomach. White arrow highlighting intestinal type of adenocarcinoma of stomach and black arrow showing adenomatous polypoidal changes.*

Conclusion

Atrophic gastritis leading to invasive cancer can take a mean period of about 15years [1]. It is known that carcinoma stomach can develop from precursor changes like chronic gastritis [2]. But unlike colon cancer, for which clear and generally accepted guidelines have been developed over the years, the situation for gastric cancer remains still incompletely developed. Gastric carcinoma of the intestinal type originates in dysplastic epithelium, which in turn develops in the milieu of chronic atrophic gastritis and intestinal metaplasia [2]. Cancers also may develop less often from gastric adenomatous polyps, which represent dysplastic epithelium arising in a raised lesion [2]. Infection with H. pylori is a major cause of non-atrophic chronic gastritis and is associated with gastric ulcer disease and distal gastric

carcinoma. Patients with intestinal metaplasia have a >10 fold increased risk of developing gastric cancer [3]. The image illustrates all this changes in one field (figure 1). Presence of this histopathological continuum is not a very well known and has not been frequently quoted in literature.

Bibliography

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