CARCINOMA OF THE GASTRO-JEJUNAL STOMA

REPORT OF A CASE WITH AUTOPSY

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Carcinoma arising at a gastro-enterostomy stoma occurs so infrequently that a new case is worthy of note. No mention is made of this lesion in Henke-Lubarsch (6), and only 5 cases have been described in the literature (1–5). The following case is of additional interest because of the fact that the gastro-jejunostomy had been performed twenty-nine years before the patient’s death from thrombosis of the right coronary artery.

FIG. 1. TUMOR COMPLETELY ENCIRCLING THE GASTRO-JEJUNOSTOMY STOMA

The stomach has been opened along the lesser curvature. A probe indicates the pylorus.

Clinical History: The patient was a white man, fifty-eight years old, who entered Lakeside Hospital in 1935 complaining of intermittent epigastric pain of thirty years’ duration. He stated that in 1906 a posterior gastro-enterostomy had been performed with complete relief of his gastric symptoms and that for the ensuing twenty-three years he had enjoyed good health. In 1930, however, he noticed a return of his old symptoms of belching and upper abdominal pain which became so distressing that he sought medical aid at another hospital. A complete achlorhydria was discovered and the patient was given hydrochloric acid by mouth, which relieved his complaints. Three and a half years later he again complained of belching, sour eructations, epigastric discomfort, and irregularity of the bowels. About this time he suffered an attack of acute pyrosis and severe pain, localized to the epigastrium. Within a few days he improved and seemed to progress favorably but during the three months before his final hospitalization he had been unable to sleep because of epigastric pain and belching.

The physical examination showed a well developed but poorly nourished man. The abdomen was scaphoid with a well healed, remote, paramedian incision in the right upper quadrant. In the right hypochondrium a sausage-shaped mass 15 X 3 cm. was palpated, ex-

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tending downward to the level of the umbilicus. A moderate degree of tenderness and increased muscular tone were present over this area.

There was a moderate degree of anemia with 51 per cent hemoglobin and 3,800,000 red blood cells and a strongly positive benzidine reaction in the stools and vomitus. The gastric contents contained no free hydrochloric acid.

X-ray examination of the stomach showed a partially functioning posterior gastro-enterostomy with a rigid stoma. There was a marked deformity of the greater curvature of the stomach as well as of the distal anastomotic loop in the region of the stoma, and the duodenal bulb was large. Examination after six hours disclosed a 20 per cent gastric retention. The filling defect corresponded to the palpable epigastric tumor which, although freely movable, could not be separated from the stomach. The final diagnosis of the roentgenologist was "carcinoma of the stomach along the greater curvature at the lower end of the fundus and in the region of the enterostomy stoma with probable obstruction of the stoma and afferent loop of the duodenum."

![Fig. 2. Area at the Periphery of the Tumor Showing Mucosa Partially Intact](image)

During his brief residence in the hospital the patient's only complaint was of epigastric distress. Late in the afternoon of the fourth hospital day, after returning to his room from the x-ray laboratory, he complained of a "fluttering feeling about the heart." Because he was unable to obtain relief in bed he attempted to get out and suddenly fell to the floor dead.

*Post-mortem Examination:* The autopsy was performed two and a half hours after death and included examination of the abdomen, thorax, and head. The body appeared much older than the stated age of fifty-eight years, and showed great wasting of the muscles and subcutaneous tissues.

The peritoneal cavity contained no fluid or exudate. The stomach had been pulled downward and to the left by numerous firm, fibrous adhesions, and the shape of the organ had been much altered by a hard, flat mass in the posterior aspect. Proximal to this mass the stomach was ballooned to a great size. The omentum lay along the greater curvature of the stomach as a thick, indurated mass which was adherent to the surrounding organs. Dense fibrous adhesions completely obliterated the foramen of Winslow and the lesser peritoneal cavity and extended to the gallbladder, duodenum, and the ascending and transverse portions of the colon. The lower third of the stomach was occupied by a firm saucer-shaped tumor 10 cm. in diameter, which encircled the ostium of the gastro-jejunal anastomosis and extended downward to surround the wall of the jejunum converting it into an
indurated, tube-like structure (Fig. 1). The regional lymph nodes were large and firm, and had smooth, pale yellowish-gray cut surfaces. The tumor tissue was grayish-pink, very hard and irregularly nodular, with many areas of ulceration which were covered by a dirty yellow friable membrane. Both the jejunum and duodenum were widely patent and the pylorus showed no evidence of obstruction. The tumor was rather sharply demarcated from the surrounding gastric mucosa, which was hemorrhagic and stained with barium. A few centimeters from the gastro-jejunostomy on the lesser curvature of the stomach was a small flat polyp which measured 10 mm. in its greatest diameter.

**Microscopic Examination:** The tumor was richly cellular. At the edges the mucosa was partially intact (Fig. 2), but as the center was approached the gastric glands were replaced by broad sheets and columns of deeply staining polyhedral cells. Extensive invasion had occurred in all directions with infiltration and splitting of the muscularis and extension into the surrounding tissues. The tumor was relatively avascular, with slit-like blood spaces which were lined by tumor cells, but all the lymphatics were plugged with cancer cells. In many situations there were small focal areas of necrosis and near the stoma deep ulcers were seen. The connective-tissue stroma was scanty and radially arranged.

In typical areas (Fig. 3) the tumor cells were small and irregular with small amounts of cytoplasm and large nuclei, some of which were vesicular while others stained deeply with hematin. Bizarre mitotic figures and multinucleated cells were frequent.

Metastases were found only in the regional lymph nodes, where the tumor type was well preserved.

The small polypoid lesion on the lesser curvature of the stomach was a well differentiated polypoid adenocarcinoma.

There was in addition a chronic atrophic gastritis, and sections taken from the fundus showed an almost complete absence of parietal cells in the gastric glands.

The significant anatomical diagnoses in the remaining organs were: severe coronary sclerosis with recent thrombosis of right coronary artery; focal myocardial fibrosis; cardiac hypertrophy and dilatation; arteriosclerosis of the aorta with mural thrombosis; pulmonary arteriosclerosis; senile emphysema; diverticulosis of the colon.
Summary

A case of a poorly differentiated adenocarcinoma arising at the stoma of a posterior gastro-jejunostomy performed twenty-nine years previously has been described in a patient who died following thrombosis of the right coronary artery.

Bibliography