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SCIENTIFIC LETTERS

Gastric adenocarcinoma: Should pancreaticoduodenectomy be associated with intraoperative suspicion of infiltration?☆

Adenocarcinoma gástrico: ¿debemos asociar pancreaticoduodenectomía ante sospecha intraoperatoria de infiltración?

In the Western world, gastric cancer is diagnosed at late stages of the disease. Radical surgery conditions survival,[1] but complete resection (R0) is not always possible. When the tumor extends beyond the stomach and affects the neighboring organs, the pancreas is involved in up to 50% of the cases,[2] and the justification for radical surgery is not clear in terms of survival. The addition of pancreaticoduodenectomy to the gastrectomy is not a customary procedure, nor is it accepted as the gold standard for the surgical treatment of advanced gastric cancer. However, there are exceptions that do justify its application, as in the case we present below.

A 76-year-old man presented with epigastric pain and constitutional syndrome of 3-month progression. Upper gastrointestinal endoscopy was carried out that identified a large antropyloric ulcer that did not allow the passage of the endoscope. Biopsy showed infiltrating adenocarcinoma. The extension study reported an antropyloric stricturing neoplasia, with perigastric adenopathies and stage II-B (T3N1M0) disease in the hepatogastric ligament (fig. 1). The patient underwent neoadjuvant chemoradiotherapy with 9 cycles of paclitaxel-carboplatin and 45 Gy over a 2-month period. Restaging chest and abdominal CT revealed partial response and salvage surgery was decided upon. Exploratory laparoscopy identified a stony tumor in the pylorus, with adenopathies of suspected malignancy in the hepatoduodenal ligament. There was apparent infiltration of the entire thickness of the gastric wall and the tumor extended into the duodenum, passing the gastroduodenal artery and reaching the papilla. Whether it was a tumor or residual fibrosis from the chemotherapy could not be determined. Diagnosis was negative for malignant cells after peritoneal wash-out, resulting in conversion to open surgery and the performance of total gastrectomy, cephalic pancreaticoduodenectomy, lymphadenectomy, and the classic Whipple reconstruction. Intraoperative biopsy confirmed disease-free surgical margins (fig. 2). The histologic study of the surgical specimen revealed grade G1, 3.5 x 3-mm residual tubular adenocarcinoma with a marked response to the neoadjuvant treatment and 12 lymph nodes with no signs of malignancy (*yp*T1b *yp*N0).

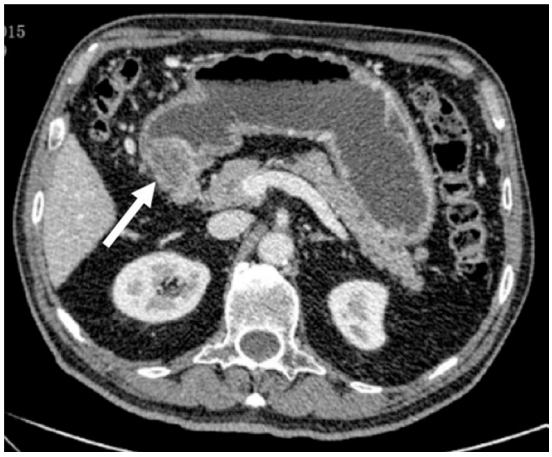

Figure 1 Initial staging CAT. Arrow: pre-chemoradiotherapy antropyloric lesion. The almost total stricture of the lumen and gastric chamber dilation can be seen.

After 3 years of follow-up, the patient is currently asymptomatic with no signs of disease recurrence.

Gastric cancer is one of the main causes of death by cancer worldwide. Its outcome is poor, due to late diagnosis. The pancreas is the organ that is the most frequently affected and is considered an independent factor for poor prognosis.[3] Complete oncologic resection of the disease is vital for optimum results, but radical surgery that involves the duodenum and pancreas results in elevated morbidity and mortality and has traditionally been thought not to improve survival and therefore was not indicated.[4] More recent studies show that surgical advances have reduced morbidity and mortality and achieved increases

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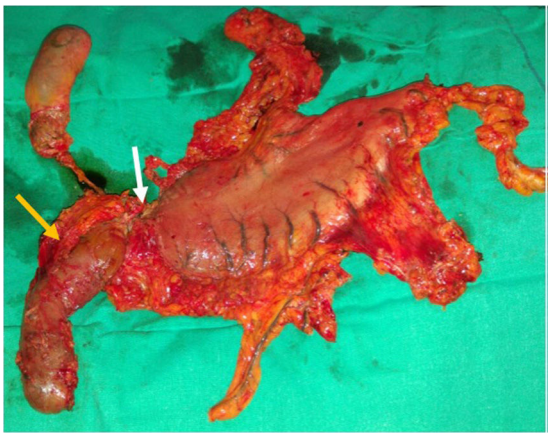

Figure 2 Surgical specimen. White arrow: antropyloric stricturing lesion affecting the first and second portions of the duodenum. Yellow arrow: duodenum-pancreas.

in disease-free survival rates.[5–7] Our case is an example of the indication for and safety of the procedure, obtaining clear benefits with respect to survival and quality of life.

Adequate evaluation of tumor extension, the basal situation of the patient, and the technical possibility of surgically removing the apparently affected zone are indispensable elements for the success of said aggressive management. In their review of pancreatic involvement in gastric cancer, Roberts et al.[8] pointed out that intraoperative overdiagnosis took place in one-third of the patients with locally advanced gastric cancer, conditioning over-treatment and considerable morbidity and mortality, but they also stated that microscopic involvement could go undetected. Hence, the importance of neoadjuvant treatment for optimizing results.[2] Ozer et al.[9] proposed the performance of echoendoscopy in all patients with locally advanced gastric cancer, to increase diagnostic accuracy. Even so, they attributed the final resection decision to surgical findings. With the use of echoendoscopy in the present case, it was not possible to pass through the stricture, nor could the distinction be made between tumor or fibrosis from or a desmoplastic reaction to the chemoradiotherapy, thus the definitive therapeutic decision was made intraoperatively. The initial staging accuracy of gastric cancer aids in making the correct therapeutic decision. It also enables better selection of the patients that can benefit from surgery that extends beyond the customary limits of standard oncologic gastrectomy and it can also prevent unnecessary high-morbidity surgeries.

The performance of a cephalic pancreaticoduodenectomy associated with oncologic gastrectomy due to advanced gastric adenocarcinoma is a safe and feasible option in exceptional cases. However, it should not be routinely recommended, given the morbidity of pancreaticoduodenectomy and the poor survival rate in patients with gastric cancer invading the second portion of the duodenum. In the context of multidisciplinary management, the excellent response to neoadjuvant oncologic treatment and an adequately trained surgical team for performing the procedure with minimum morbidity, can offer survival benefits and be the keys to the success of that strategy in selected patients.

Ethical disclosures

Protection of human and animal subjects. The authors declare that no experiments were performed on humans or animals for this study.

Confidentiality of data. The authors declare that they have followed the protocols of their work center on the publication of patient data.

Right to privacy and informed consent. The authors declare that no patient data appear in this article.

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Conflict of interest

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Prolapsing mucosal polyp: A form of colonic polyp not to be forgotten☆

Pólipo prolapsado de mucosa: una forma de pólipo del colon que no debe ser olvidada

Prolapsing mucosal polyps of the colon are an uncommon finding during colonoscopy. However, when present, those lesions, which are a form of colonic polyps, are frequently unrecognized and misdiagnosed as neoplastic lesions, sometimes leading to unnecessary endoscopic or surgical resection.

We present herein a case of symptomatic prolapsing mucosal polyp of the colon. We also reviewed the clinical, endoscopic, and histopathologic characteristics, as well as the potential management, of that entity.

A 62-year-old woman with no relevant past medical history was referred to our outpatient clinic for resection of a polypoid lesion, previously detected during colonoscopy, that was located in the sigmoid colon. She had a 6-month history of nonspecific gastrointestinal symptoms consisting of constipation and abdominal bloating. Physical examination revealed mild abdominal tenderness in the left lower quadrant upon palpation. Laboratory tests were within normal range.

At flexible rectosigmoidoscopy, we found a 2 cm, lobulated, bright, hyperemic mass projecting into the lumen of the sigmoid colon, with the morphologic characteristics of a polyp (Paris Ip – pedunculated polyp). It had a broad stalk with normal surrounding mucosa, as shown in fig. 1. We also observed a spastic colon and associated sigmoid diverticula. Hot snare polypectomy was performed.

The pathology analysis of the resected lesion, as shown in fig. 2, identified glandular crypt abnormalities and a thickened muscularis mucosae, with fibromuscular obliteration of the lamina propria, all of which are characteristic features of a prolapsing mucosal polyp.

The patient was treated with a high-fiber diet, reporting symptom resolution, along with normal bowel movement frequency and stool consistency.

Prolapsing mucosal polyps are the result of chronic prolapse of the intestinal mucosa. They have been described in patients undergoing colonoscopic evaluation as large redundant hyperemic mucosal folds that mimic the appearance of a polypoid mass projecting into the lumen of the sigmoid colon. Due to under-recognition or misdiagnosis of said lesion, its true prevalence at endoscopic evaluation is unknown.

Prolapsing mucosal polyps form part of the spectrum of lesions called ''mucosal prolapse syndrome''. That term was proposed in 1977 by Du Boulay et al. to encompass a variety of disorders with similar clinical and histologic characteristics.[1] The proposed conditions that make up part of the so-called mucosal prolapse syndrome include solitary rectal ulcer syndrome,[2–4] gastric antral vascular ectasia,[5] inflammatory cloacogenic polyps,[4] inflammatory''cap'' polyps,[6] and prolapsing mucosal polyps,[6] all of which share similar histologic features.[7]

Prolapsing mucosal polyps have been described to occur in the sigmoid colon in association with diverticular disease.[7,8] The exact mechanism leading to the formation of a prolapsing mucosal polyp is uncertain. However, in patients with a long history of defecation straining, a combination of venous congestion and mucosal redundancy secondary to repeated colonic spastic contractions is the most probable mechanism.[8–10] In the largest case series available, Tendler et al.[11] reported on 15 patients with prolapsing mucosal polyps in the sigmoid colon, describing their clinical, endoscopic, and histologic features. Occult gastrointestinal bleeding, hematochezia, cramping abdominal pain, and altered bowel habits were the most frequent presenting symptoms. The main endoscopic features were the presence of hyperemic polyps and prominent redundant folds with petechiae, all involving the sigmoid colon. The most frequently encountered histopathologic findings were glandular crypt abnormalities (hyperplasia, branching, elongation, distortion) in 100%, fibromuscular obliteration of the lamina propria in 93%, hypertrophy and extension of fibromuscular tissue into the lamina propria in 87%, and mucosal capillary abnormalities (congestion, hyalinization, thrombosis, dilation) in 87%.

Common differential diagnoses in patients with prolapsing mucosal polyps are adenomatous polyps, malignancy, ulcerative colitis, and hemangiomas. To the best of our knowledge there are no reports of malignant transformation of prolapsing mucosal polyps.

Currently, there is no consensus on the standard treatment of prolapsing mucosal polyps. Some reports have shown that conservative management based on a high-fiber diet results in a significant regression of those hyperemic polypoid lesions.[10] Their clinical significance lies in the fact

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