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Editorial

Current Status of Gastrectomy for Cancer: “Less Is Often More”[☆]



Estado actual de la gastrectomía por cáncer. «Less is often more»

Gastric cancer is currently the third leading cause of cancer mortality worldwide. Despite advances in treatment, it continues to present an unfavorable prognosis, with a 5-year survival of around 25%.¹ Thanks to better food preservation, the incidence has declined in recent decades in developed countries. However, more proximal and diffuse tumor infiltration are on the rise, occurring in younger patients. At present, gastric cancer remains a disease that is managed surgically, and the surgeon should direct the treatment with curative intent, from diagnosis to follow-up. Even today, the majority of patients with gastric cancer worldwide continue to be operated on straight away, with no prior assessment for combined treatment. However, the treatment of gastric cancer should now follow a multidisciplinary approach, as better survival has been demonstrated in patients treated with either associated perioperative chemotherapy or postoperative radio-chemotherapy.² In order to adequately select patients and plan for their treatment, all patients with gastric cancer should be evaluated by a committee of specialists from the different disciplines involved in the therapeutic process. Our patients receive neoadjuvant chemotherapy at preoperative stages above T2N+ and undergo surgery 4 weeks later. Postoperative radio-chemotherapy is maintained in patients who have not received prior neoadjuvant chemotherapy, patients with unsatisfactory resections (R1) or those with factors for a poor prognosis in the pathology study.³ Furthermore, in order to reduce preoperative complications, enteral immunonutrition should be considered, especially in patients with different degrees of malnutrition.⁴

Worldwide, open surgery is still the preferred approach for gastrectomy due to cancer.⁵ However, the technical development of laparoscopy and the experience accumulated over the years through bariatric surgery have led to more and more hospitals performing laparoscopic gastrectomies for cancer. Once the learning curve is overcome, several current series

have proven not only the safety and reproducibility of minimally-invasive techniques, but also a lower rate of complications and hospital stay, all without compromising the oncologic prognosis.⁶ Our group performed the first total gastrectomy for cancer in 1996, which was the first oncological resection in gastric cancer performed in the West and the first total gastrectomy in the world.⁷ Since then, we have been progressively developing the technique and extending the indication of its use to perform practically all gastrectomies in this manner today, with a conversion rate that is nearly zero. Currently, there are no absolute contraindications for laparoscopic gastrectomy at advanced medical centers, although previous interventions or certain patient comorbidities may make the open approach recommendable.⁸

There is controversy regarding the magnitude of gastric resection that should be performed according to the location of the tumor. International clinical guidelines recommend total gastrectomy for cases in which the tumor presents proximally and for those with diffuse infiltration with the aim of achieving a proximal safety margin of 5–8 cm.^{9–11} However, even in experienced hands, total gastrectomy presents significantly higher morbidity and mortality than subtotal gastrectomy. The most feared of the complications is esophagojejunal anastomotic leak, which entails high morbidity and mortality that can lead to death in a significant number of patients. In this regard, we believe that extended gastric resections, such as the 95% gastrectomy previously standardized by our group,¹² which may or may not be associated with intraoperative biopsy by freezing the surgical margins, can even help achieve R0 resection of tumors in the body and fundus of the stomach without the need to systematically perform total gastrectomies, thus significantly reducing morbidity and mortality.¹³

Traditionally, *en bloc* omentectomy with the gastric resection piece has been considered necessary in oncological

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gastrectomy to treat cancer. However, the expansion of video-assisted oncological gastrectomies has raised some controversies about this need and the way to conduct omentectomy itself. Even in open surgery, especially in patients with previous interventions, omentectomy is not always simple and can be associated with complications, such as injuries to the spleen or transverse mesocolon, as previously described by other authors.¹⁴ Furthermore, the literature reports finding lymph nodes in only a small percentage of total omentectomy pieces (0%–28%). This may possibly be related to the lymph node group⁴ resected with the greater omentum, which presents in advanced disease stages metastasis in 2% of cases and peritoneal implants in 3%–8%.^{15,16} According to other published cohort studies, no differences have been observed between the disease-free period and 3-year and 5-year survival between patients with total and partial omentectomy.^{14–16} Currently, the European (ESMO) and American (NCCN) guidelines on gastric cancer do not mention omentectomy as part of the treatment for gastric cancer, while the Japanese Gastric Cancer Treatment Guidelines recommend complete omentectomy for T3–T4 tumors.^{9–11} Moreover, in reviewing the surgical literature, we found that there is no prospective randomized study demonstrating the need to associate omentectomy in a radical gastrectomy.¹⁷ Therefore, in our opinion, total omentectomy is not necessary in oncological gastrectomy, so we perform partial omentectomy, initiating the resection 4 cm distal to the gastroepiploic vessels.

Bursectomy, or resection of the peritoneum of the lesser sac, is only recommended for T3–T4 tumors with serous positivity on the posterior side of the stomach. Its aim is to eliminate possible microscopic peritoneal implants, so it should not be performed routinely in gastrectomies for cancer. Along this same line, a treatment that seems to be beneficial is Hyperthermic Intra Peritoneal Chemotherapy (HIPEC), which is performed by mini-invasive techniques in gastric tumors with microscopic peritoneal disease. Nevertheless, for the time being it cannot be considered a standard treatment and should be reserved for specialized medical centers.^{18,19}

Another of the continuing points of debate that has aroused interest in recent years is the extension of lymph node dissection. There is sufficient evidence to support that D2 lymphadenectomy decreases the recurrence rate and increases survival compared to D1.²⁰ Furthermore, the preservation of lymph node groups 10 and 11d seems to be related with a decrease in complications, which is why our group routinely performs *en bloc* extraction of lymph node groups 1–6 added to 7, 8, 9, 11p and 12, resecting stations 10 and 11d only in cases in which the tumor is located in the upper part of the greater curvature or presents extension toward the gastrosplenic ligament and short vessels.²¹

The expansion of mini-invasive techniques has led to the generalization of multimodal rehabilitation measures in gastric surgery, which implies a better and faster recovery of patients with a shorter hospital stay and a greater degree of satisfaction. None of the patients treated surgically by our group was systematically admitted to the intensive care unit, had central venous catheters, nasogastric or urinary catheters or surgical drainage, and oral intake and mobilization were initiated on the day of surgery.²² All the mentioned measures

are directed toward a lower rate of complications that, associated with a faster recovery, allows a greater number of patients to receive the necessary adjuvant treatment in the postoperative period, which could provide the disease a better prognosis.

Despite surgical and oncological advances, gastric cancer continues to be a challenge due to its late diagnosis and poor prognosis. The new molecular classifications have subclassified gastric cancer into a heterogeneous group of diseases, which in the future could help better understand the disease and provide different therapeutic targets within the concept of personalized medicine.²³ We should continue working along the same line with consensus guidelines, registries and communication of the results obtained. Projects like the EURECCA can help in this regard, as its aim is to advance toward the cure of a disease that is still a current concern.²⁴

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