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Editorial

Cancer of the Esophagogastric Junction: A Border in Continuous Movement[☆]



Cáncer de la unión esofagogástrica: una frontera en continuo movimiento

Henry David Thoreau said, “The frontiers are not east or west, north or south; but wherever a man fronts a fact.” Many surgeons have often had to face more than facts to treat conditions of the gastroesophageal junction, an anatomical area that could be defined as the muscular/mucosal frontier.¹ Under endoscopic vision and normal conditions, this region separates the squamous epithelium of the esophagus from the columnar epithelium of the gastric mucosa. From a functional standpoint, it behaves as a true sphincter, enabling correct passage of the bolus and saliva, as well as vomit and physiological gastroesophageal reflux in the opposite direction.

This anatomical region is the location of a number of conditions that are treatable medically or even surgically on many occasions. Gastroesophageal reflux disease, certain motor disorders like achalasia, Barrett’s esophagus and certain benign tumors, in addition to malignant lesions, are pathologies of this frontier location.

The incidence of malignant neoplasms of the gastroesophageal junction, mainly adenocarcinoma, is currently on the rise, and certain points of the therapeutic approach continue to be controversial. Evidence of this is seen in the evolution and increasing number of scientific publications dealing with esophageal and gastroesophageal junction tumors, which has gone from 900 publications up until 2007 to more than 1750 in 2016.² In addition, much of the evidence reported by the series published with the greatest number of patients comes from Eastern countries. In this region, both diagnostic and therapeutic management have some disparate points compared to clinical practice in Western countries, where the prevalence of these tumors is much lower and, therefore, greater controversy has been generated with regards to management.

Optimal therapeutic management of gastroesophageal junction cancer is based on two pillars: the ability to establish the precise location of the tumor epicenter, and correct locoregional staging. It was Siewert and Stein who described one of the most

commonly used topographic classifications to define the location of this type of tumors.³ However, in many cases it is difficult to classify and specify the actual origin during preoperative testing. The diagnostic methods currently available are sometimes limited for this purpose,⁴ so defining preoperative treatment and the most appropriate surgical technique for each case can lead to certain difficulties. In some cases, the staging and exact topography of the lesion can only be established intraoperatively (at which time the therapeutic decision must be made), while in others decisions can only be made after the postoperative pathology study of the resected specimen.

On one hand, in early lesions limited to the superficial mucosa or submucosa that are small in size and show no evidence of lymph node or metastatic disease, endoscopic resection techniques are being used with greater assiduity and safety in expert hands.⁵ However, tumors in more advanced stages, which are more frequent in our setting, require perioperative treatment (chemo and/or radiotherapy) together with surgical treatment using esophagogastrectomy or extended gastrectomy.⁶

The surgical approach with curative intent, whether transabdominal, transhiatal or transthoracic by means of open, minimally invasive or robotic surgery,⁷ must guarantee *en bloc* R0 resection with safety margins and a more or less extensive lymph node dissection depending on the tumor location and pre-/intraoperative evaluation.⁸⁻¹⁰

In addition to surgery and over the course of time, chemotherapy and radiotherapy have increased surgical patient survival and the rate of complete surgical resections, thereby significantly reducing tumor recurrence rates.¹¹ However, the best regimen to be used in this type of tumors has not yet been defined,¹² and several alternatives are currently available with similar results.

With advances made in molecular biology and the detection of different mutations such as HER2, several clinical trials are

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underway in which the addition of inhibitory agents for this and other therapeutic targets is proposed¹³⁻¹⁵ in conjunction with conventional chemotherapy and radiotherapy regimens in order to improve overall and disease-free survival results.

Obviously, obtaining optimal results that meet the quality standards for surgical resection, postoperative morbidity/mortality and survival requires proper training, as well as the centralization of these processes in experienced workgroups with a multidisciplinary team and adequate technological equipment.¹⁶ Similarly, the creation of multicenter registries and projects¹⁷ increases the number of cases treated and analyzed, thereby improving the quality of evidence and promoting superior research, both in clinical studies and translational medicine.

Therefore, proper management of gastroesophageal junction tumors requires coordinated multidisciplinary cooperation and on certain occasions is a challenge that requires individualized decisions on aspects where the evidence has not yet provided a solid response. Perhaps, as Ricardo Arjona said, "Borders are drawings on maps that I still cannot understand," and we still have a long way to go to find answers to the points of controversy and limited evidence in the management of these types of tumors.

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Marcos Bruna Esteban^{a,*}, María Ángeles Ortiz Escandell^b, Pascual Parilla Paricio^b

^aServicio de Cirugía General y del Aparato Digestivo, Hospital Universitario y Politécnico La Fe, Valencia, Spain

^bServicio de Cirugía General y del Aparato Digestivo, Hospital Universitario Virgen de la Arrixaca, Murcia, Spain

*Corresponding author.

E-mail addresses: drbruna@comv.es, mbruna16@yahoo.es (M. Bruna Esteban).

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