CIRUGÍA ESPAÑOLA

www.elsevier.es/cirugia

Editorial

Surgery for cancer of the oesophagus: A plea for centralization

Cirugía del cáncer de esófago: una llamada en favor de la centralización

Oesophageal cancer is an aggressive disease, often advanced at diagnosis and of relatively low incidence, affecting patients with multiple comorbidities, often malnourished, and whose treatment requires close collaboration between different specialists.

There is a high level of evidence that patients with oesophageal cancer benefit from multimodal treatment[1], and therefore the Tumour Committee plays a key role, particularly if its decisions are based on an agreed and updated protocol that offers the best available treatment to each case. In streamlining the process, both during the extension study and in the preoperative optimisation phase (physical, nutritional, psychological, associated comorbidity, and anaemia), the case manager or "liaison nurse" makes it possible to synchronise diagnostic tests and interconsultations, which significantly reduces delays.

As Mariette and Piessen[2] highlight, the quality of surgery is based on an R0 resection, i.e., with free macro and microscopic margins, and on an adequate lymphadenectomy, which requires the inclusion in the surgical specimen not only of the affected organ, but also of the surrounding lympho-fatty tissue, and therefore requires a transthoracic approach. These conditions are more easily met in a unit with a minimum volume of activity, which also helps minimise complications, or their effect, through early and specialist management, reducing failure to rescue (an indicator that describes the mortality resulting from complications that have not been identified and adequately treated).

There is a clear relationship between volume of activity and operative mortality. Metzger et al.[3] report a mortality of 18% in centres that perform fewer than 5 oesophagectomies per year, compared to 4.9% if they perform in excess of 20; these figures consistent with the classic series of Birkmeyer et al.[4]. In several European countries, as well as in the United States, the minimum recommended volume is 20 resections per year. This volume must be accompanied by the capacity for a multidisciplinary response to complications 24 h a day (interventional endoscopy and radiology, in addition to oesophageal surgery and a critical care unit) and a prospective registry of activity to evaluate the quality of outcomes[5], compare them with others and with international benchmarks[6], and base our decisions and plans for improvement on global data rather than on our limited experience. In our setting, some autonomous communities, due to their population, can barely reach these figures, and therefore it is advisable to concentrate activity in a single centre and monitor outcomes[7].

In the United Kingdom, there is one oesophageal surgery unit per million inhabitants[8], with a median number of procedures of 17.5 per hospital per year between 2005 and 2010, in contrast to the United States, where half of the hospitals performed 2 or fewer[9]. In this country, between 2000 and 2014, there was spontaneous centralisation in oesophageal cancer surgery: procedures performed in high-volume centres rose from 29.2% to 68.5%, with a reduction in mortality from 10% to 3.5%, including all races, public hospitals, and low-income patients[10].

In the process of concentrating highly specialised digestive oncological surgery in Catalonia, in-hospital mortality in oesophageal cancer surgery reduced by 75%, from 11.2% in the period 2005–2011 to 2.8% in 2012–2013[11]. Currently, following instruction 01/2019, oesophageal cancer surgery in Catalonia can only take place in 5 centres, with a minimum volume of 11 procedures per year.

The existence of a minimum volume of activity also allows progress in the development and implementation of minimally invasive surgery, with the advantages that this entails, minimising the effect of the learning curve, which is manifested not only in the percentage of complications, but also in poorer quality of resection during the initial phases of the experience.

In their health policies, countries such as Austria, Denmark and Switzerland base the decision to focus a disease on criteria including low incidence, complexity (with high postoperative

morbidity), structural requirements, cost and evidence of a volume-outcome relationship[5]. The concentration of cases favours the adequate selection of patients, the dynamisation of the process, the improvement in surgical technique, the phenomenon of "rescue" in case of complications, the possibility of training specialists appropriately and research, without forgetting the possibility of accreditation by scientific societies.

It is not only a necessity to centralise oesophageal cancer surgery in our country, and therefore improve global results, but it is also an opportunity to implement some already defined oncological plans and to set an example for other diseases with similar characteristics, such as pancreatic or rectal cancer.

This is the challenge we face. We are all in this together.

REFERENCES

1. National Comprehensive Cancer Network (NCCN). NCCN Clinical practice guidelines in oncology. In: Esophageal and esophagogastric junction cancers. Version 2; 2022.
2. Mariette C, Piessen G. Oesophageal cancer: How radical should surgery be? Eur J Surg Oncol. 2012;38:210–3.
3. Metzger R, Bollschweiler E, Vallböhmer D, Maish M, DeMeester TR, Hölscher AH. High volume centers for esophagectomy: What is the number needed to achieve low postoperative mortality? Dis Esoph. 2004;17:310–4.
4. Birkmeyer JD, Siewers AE, Finlayson EVA, Stukel TA, Lucas FL, Batista I, et al. Hospital volume and surgical mortality in the United States. N Engl J Med. 2002;346:1128–37.
5. Vonlanthen R, Lodge P, Barkun JS, Farges O, Rogiers X, Soreide K, et al. Towards a consensus on centralization in surgery. Ann Surg. 2018;268:712–24.
6. Schmidt HM, Gisbertz SS, Moons J, Rouvelas I, Kauppi J, Brown A, et al. Defining benchmarks for transthoracic esophagectomy: A multicenter analysis of total minimally invasive esophagectomy in low risk patients. Ann Surg. 2017;266:814–21.
7. Recomendaciones de la Sección de cirugía esófago-gástrica de la AEC sobre la práctica de la cirugía del cáncer de esófago en nuestro entorno. Available in: https://extranet.aecirujanos.es/Esofagogastrica/Documentacion-y-Protocolos_es_11_202.html.
8. Martínez Isla A. Sectorización de las enfermedades oncológicas. La experiencia del Reino Unido (Editorial). Cir Esp. 2005;77:245–6.
9. Munasinghe A, Markar SR, Mamidanna R, Darzi AW, Faiz OD, Hanna GB, et al. Is it time to centralize highrisk cancer care in the United States? Comparison of outcomes of esophagectomy between England and the United States. Ann Surg. 2015;262:79–85.
10. Schlottmann F, Strassle PD, Charles AG, Patti MG. Esophageal cancer surgery: Spontaneous centralization in the US contributed to reduce mortality without causing health disparities. Ann Surg Oncol. 2018;25:1580–7.
11. Manchón-Walsh P, Espinàs JA, Prades J, Aliste L, Pozuelo A, Benaque A, et al. Evaluación del proceso de concentración de la cirugía oncológica digestiva de alta especialización en Cataluña. In: Monográficos de la Central de Resultados. Agència de Qualitat i Avaluació Sanitàries de Cataluña, Departament de Salut de la Generalitat de Catalunya; 2016.

Ismael Diez del Val

Sección de Cirugía Esófago-Gástrica y Bariátrica, Servicio de Cirugía General y del Aparato Digestivo, Hospital Universitario Basurto, Bilbao, Spain

E-mail address: ismael.diezdelval@osakidetza.eus

2173-5077/