

Editorial

CIRUGÍA ESPAÑOLA

www.elsevier.es/cirugia



Centralisation of Upper Gastrointestinal Surgical Services[☆] Centralización de la cirugía del tracto digestivo superior

Following the Calman Hine report in 1995 cancer services in the United Kingdom have slowly been centralised.¹ Large cancer centres provide specialist cancer care for populations of between 1 and 4 million population and work closely with smaller hospitals (cancer units) in their cancer network. This Editorial will describe the benefits and disadvantages that have come from this development and highlight some of the potential pitfalls of the centralisation process and how they might be avoided.

The drive for centralisation of cancer services arises from observed improvements in peri-operative mortality from studies around the world.^{2,3} Not all studies are clear cut in their findings⁴ but there does now appear to be a consensus that there is a link between hospital volume and perioperative mortality.⁵ In addition, high volume surgical units can potentially provide enhanced training opportunities, improved standardisation of care, increased recruitment to clinical trials, better audit of outcomes, and may result in shorter length of hospital stay leading to reduced costs. The disadvantages of centralisation are that experienced surgeons working in smaller hospitals may be lost to the service unless they move hospitals or arrangements are made for them to operate on their patients in the high volume cancer centre. If a surgeon chooses to re-locate to the cancer centre it may be difficult to find a replacement in the smaller hospital which is now restricted in the type of surgery that it can perform. Patients may have to travel further for their cancer care following centralisation⁶ and, although many will accept this, transport links and parking arrangement must be adequate at the cancer centre. The complexity of coordinating a patient's care across 2 localities (cancer unit and centre) should not be under estimated. Unless communication is excellent there is a significant risk that patients can be lost and results of staging investigations not disseminated to the necessary clinicians.

It has taken 10 years to centralise oesophageal and gastric cancer surgery in the UK. There are now 43 NHS Trusts offering this surgery in England and Wales and a further 4 in Scotland.⁷ Northern Ireland has yet to rationalise its service. The recent national oesophago-gastric cancer audit has shown that postoperative mortality in England and Wales following oesophagectomy and gastrectomy has fallen to approximate 5%.⁸ This is almost half the mortality rate prior to centralisation.⁹ This improvement is likely to be multi-factorial but undoubtedly centralisation has played a part.

Centralisation has not, however, been achieved without difficulty. Local implementation was devolved down from The Department of Health to cancer networks at a time of major health service re-organisation. Often these Networks were unsure how to decide where their cancer centre would be and prolonged consultation periods with state holders followed. The implementation of a centralisation plan requires high quality management to prevent clinical rivalries from flaring up and damaging the prospect for good working relationships between cancer units and newly designated centres in the future. A high quality video conferencing facility in all Trusts participating in centralisation is absolutely imperative. These are used for weekly multi-disciplinary team meetings and the infrastructure should be established prior to centralisation so that teams have an opportunity to get used to discussing their cases together before the system goes live. A weekly meeting resulting in immediate written management plans disseminated to all uses is important, as is a high quality data collecting system supported by a data clerk and manager. This system must be able to record quality data on clinical decisions and management plans and produce regular reports on outcomes for users.

Another absolute requirement for successful centralisation of cancer services is a network of experienced specialist nurses. Without these nurses centralisation will fail. They are the patient's advocates and organise the relevant communication between cancer units and centres ensuring that the results of investigations are available in different hospitals. In addition, the cancer centre needs to have enough physical facilities such as operating theatres, HDU and intensive care

^{*} Please, cite this article as: Hardwick RH. Centralización de la cirugía del tracto digestivo superior. Cir Esp. 2011;89(9):563–4.

beds, and surgeons to provide a comprehensive service. Ideally this should be 365 days of the year 24 h a day and it is very hard to provide this without a minimum of 5 surgeons. In the UK many oesophago-gastric centres serve populations of just over a million, but as the resection rate has fallen to about 20% and definitive non-surgical therapy such as chemoradiation has increased in popularity, the population needed to support a cancer centre has increased to closer to 2 million. This should generate approximately 150 oesophago-gastric resections a year.

Patient care is not automatically improved by centralisation. It is imperative that there is adequate investment to support the development of a centralised team. Patients also require support as they will often need to travel further to meet with their perspective surgeons and undergo care. However, careful explanations as to why this is happening are usually well received. Neurosurgical and plastic surgical services have been centralised in the UK for many years and there is a generalised acceptance of this. The proof that centralisation is worth the effort must come from accurate audit of clinical outcomes, trainees logbooks, and feedback from patients.

REFERENCES

- 1. Calman K, Hine D. The Expert Advisory Group on Cancer to the Chief Medical Officers of England and Wales Department of Health Publications; 1995.
- 2. Chowdhury MM, Dagash H, Pierro A. A systematic review of the impact of volume of surgery and specialization on patient outcome. Br J Surg. 2007;94:145–61.

- 3. Birkmeyer JD, Stukel TA, Siewers AE, Goodney PP, Wennberg DE, Lucas FL. Surgeon volume and operative mortality in the United States. N Eng J Med. 2003;349:2117–27.
- Smith DL, Elting LS, Learn PA, Raut CP, Mansfield PF. Factors influencing the volume–outcome relationship in gastrectomies: a population-based study. Ann Surg Oncol. 2007;14:1846–52.
- Hogan AM, Winter DC. Does practice make perfect? Ann Surg Oncol. 2008;15:1267–70.
- Stitzenberg KB, Sigurdson ER, Egleston BL, Starkey RB, Meropol NJ. Centralization of cancer surgery: implications for patient access to optimal care. J Clin Oncol. 2009;27:4671–8.
- Palser TR, Cromwell DA, Hardwick RH, Riley SA, Greenaway K, Allum W, et al. Re-organisation of oesophago-gastric cancer care in England: progress and remaining challenges. BMC Health Services Res. 2009;9:204.
- Palser TR, Cromwell DA, Van der Meulen JH, Greenaway K, Riley SA, Hardwick RH. National oesophago-gastric cancer audit; 2010 [accessed 2011 Jul 23]. Available from: http:// wwwicnhsuk/services/national-clinical-audit-supportprogramme-ncasp/audit-reports/oesophago-gastric-cancer.
- McCulloch P, Ward J, Tekkis PP. Mortality and morbidity in gastro-oesophageal cancer surgery: initial results of ASCOT multicentre prospective cohort study. BMJ. 2003;327:1192–7.

Richard H. Hardwick

Cambridge Oesophago-Gastric Centre, Addenbrookes Hospital, Cambridge, United Kingdom

> 2173-5077/\$ – see front matter © 2011 AEC. Published by Elsevier España, S.L. All rights reserved. doi:10.1016/j.cireng.2011.06.003