



Editorial

Enhanced Recovery: Minimally Aggressive Perioperative Practice[☆]



Rehabilitación multimodal: práctica clínica perioperatoria de mínima agresión

Everything around us now is changing at an enormous speed, and sometimes it is important to take a break and think about the importance of some of these changes, how and why they occurred as well as the circumstances that led to them. A short time ago the average hospitalisation time after a cholecystectomy was between 4 and 6 days, while for a fundoplication it was 7–10 days, with recovery times after discharge lasting for more than a month in both cases.¹ These figures are now considered unacceptable thanks to the widespread use of minimally aggressive surgical techniques. These are now known as minimally invasive surgery (MIS). The reduction in surgical stress associated with these techniques has made it possible to optimise the results of a large number of procedures, as they are fully implemented in basic procedures and have developed notably in more complex ones.² Moreover, in an effort to reduce the consequences of surgery to a minimum, innovative techniques have been developed in recent years with the aim of maximising the advantages of MIS. Nevertheless, although these innovations have been shown to be both feasible and safe, it has not proven possible to completely implement and develop them, due basically to their great technical difficulty and doubts regarding their efficacy.²

In this context, the limited impact of technical and technological development on the results of surgical treatment is striking, especially if we ignore other aspects of clinical practice that show great potential for improvement.

At the same time as the first steps were taken in MIS,³ interest arose in gaining more knowledge about the physiological response to surgery as a fundamental aspect of how surgical patients evolve. The first works of Henrik Kehlet^{4,5} appeared on multimodal rehabilitation, which was initially known as fast-track. Kehlet himself subsequently wrote in 2003⁶: “During recent years, surgically operated patients have

experienced the benefits deriving from the advances in anaesthesia, pain control, MIS and perioperative care as a whole”, opening up the way for multimodal rehabilitation programmes. Additionally, the foundations of these programmes have gradually been laid, understanding them to consist of a rehabilitation process that runs throughout the perioperative period. This commences at the moment of diagnosis, and ends when the patient is once again in the same conditions as he/she was before starting the care process.⁷ That is, multimodal rehabilitation aims to prepare the patient for surgery, ensuring that he/she has the best possible surgery and recovers under the best conditions.⁸

Nobody now doubts the role of MIS and the revision of the basic principles of operative care (the use of catheters, drainage and nasogastric tubes, etc.) in multimodal rehabilitation protocols. Nevertheless, it is essential to understand that the surgical act is only a part of the treatment of these patients, and that optimisation of perioperative care is a multidisciplinary active process. It requires the cooperation of anaesthetists, nutritionists and nurses, creating a team that is able to integrate single mode actions while bringing them together in a synergic combination of multimodal care “packages” that can be adapted to suit each individual situation.⁹ All of these aspects will make it possible to achieve pain-free operations with minimum morbidity, and although these aims are utopian, they are also what all surgeons consider to be paradigmatic care.

The advantages of multimodal rehabilitation programmes started to become visible in the field of colorectal surgery, with a reduction in morbidity and improved efficacy.^{10–12} These programmes have subsequently been adapted to other areas, in our speciality as well as in other surgical specialities.^{13–15} There is now more than enough evidence to justify the effort that may be involved in implementing it. That is, as the

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recommendations on abdominal surgery recently issued by the Ministry of Health¹⁶ state, the debate is not about the different steps in the protocol or their benefits, but rather the question we should ask ourselves is: “why aren’t I using it already?”

Among the difficulties to introduce the new protocol, the main one is said to be the reluctance of professionals to change deeply rooted traditional practices, even when some of them have been proven to be ineffective or, worse still, harmful. In a recent survey conducted with the support of several scientific societies with the aim of analysing the degree of awareness and implementation of multimodal rehabilitation programmes in our country, more than 70% of the 272 professionals (45% surgeons and 44% anaesthetists) who answered it stated that they had a protocol. However, hardly 30% of these protocols were multidisciplinary. This fact exposes 2 barriers, one the one hand the fact that we still find it hard to form a working team with other specialities, and on the other (and especially importantly) that we may feel sure that we are performing multimodal rehabilitation when the only thing we are actually doing is to implement a departmental protocol. The lack of a culture that would control how protocols are followed and audit the results is a further hindrance.

The Spanish Association of Surgeons has been aware of all the above points for some time, and it has just set up a multimodal rehabilitation workgroup. This will work closely with other scientific associations (SEDAR, SENPE, and SEECIR) to support and help the implementation of protocols and the spread of these programmes in our speciality in an agreed and uniform way. With these initiatives, we will be closer to achieving a situation in which wherever we go and wherever we live, we will be treated in the same way, the best way possible.

REFERENCES

1. Park AE, Lee TH. Evolution of minimally invasive surgery and its impact on surgical residency training. In: *Minimally Invasive Surgical Oncology*. Berlin, Heidelberg: Springer Berlin Heidelberg; 2011: 11–22.
2. Moreno-Sanz C, Tenías-Burillo JM, Morales-Conde S, Balague-Ponz C, Díaz-Luis H, Enríquez-Valens P, et al. 25 años de cirugía laparoscópica en España. *Cir Esp*. 2014;92:232–9.
3. Polychronidis A, Laftsidis P, Bounovas A, Simopoulos C. Twenty years of laparoscopic cholecistectomy: Phillipe Mouret-March 17, 1987. *JSLs*. 2008;12:109–11.
4. Kehlet H. The stress response to surgery: release mechanisms and the modifying effect of pain relief. *Acta Chir Scand Suppl*. 1989;550:22–8.
5. Kehlet H. The surgical stress response: should it be prevented? *Can J Surg*. 1991;34:565–7.
6. Kehlet H, Dahl JB. Anaesthesia, surgery, and challenges in postoperative recovery. *Lancet*. 2003;362:1921–8.
7. Moore FD. Getting well: the biology of surgical convalescence. *Ann N Y Acad Sci*. 1958;73:387–400.
8. Delivering Enhanced Recovery. Helping patients to get better sooner after surgery. Enhanced Recovery Partnership programme. NHS. Available from: <http://www.nesra.co.uk/files/training/education/Delivering%20enhanced%20recovery.pdf> [accessed 15.09.12].
9. Kehlet H, Wilmore DW. Fast-track surgery. *Br J Surg*. 2005;92:3–4.
10. Wind J, Polle SW, Fung Kon Jin PHP, Dejong CHC, Meyenfeldt von MF, Ubbink DT, et al. Systematic review of enhanced recovery programmes in colonic surgery. *Br J Surg*. 2006;93:800–9.
11. Spanjersberg WR, Reurings J, Keus F, van Laarhoven CJ. Fast track surgery versus conventional recovery strategies for colorectal surgery. *Cochrane Database Syst Rev*. 2011;16:CD007635.
12. Ramírez JM, Blasco JA, Roig JV, Maeso-Martínez S, Casal JE, Esteban F, et al., Spanish working group on fast track surgery. Enhanced recovery in colorectal surgery: A multicentre study. *BMC Surg*. 2011;11:9.
13. Braga M, Pecorelli N, Ariotti R, Capretti G, Greco M, Balzano G, et al. Enhanced recovery after surgery pathway in patients undergoing pancreaticoduodenectomy. *World J Surg*. 2014;38:2960–6.
14. Lemanu DP, Singh PP, Berridge K, Burr M, Birch C, Babor R, et al. Randomized clinical trial of enhanced recovery versus standard care after laparoscopic sleeve gastrectomy. *Br J Surg*. 2013;100:482–9.
15. Cerantola Y, Valerio M, Persson B, Jichlinski P, Ljungqvist O, Hubner M, et al. Guidelines for perioperative care after radical cystectomy for bladder cancer: Enhanced Recovery After Surgery (ERAS[®]) society recommendations. *Clin Nutr*. 2013;32:879–87.
16. Vía Clínica de Recuperación Intensificada en Cirugía Abdominal (RICA). Ministerio de Sanidad. Guía Salud (OPBE). Available from: <http://portal.guiasalud.es/contenidos/iframes/documentos/opbe/2015-07/ViaClinica-RICA.pdf> [accessed 30.07.15].

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