

## CIRUGÍA ESPAÑOLA

CIRUGÍA
ESPANOLA
ADRICA INDECEDE 2015

TOTAL OF THE CONTROL OF THE

www.elsevier.es/cirugia

## **Editorial**

## Minimally invasive surgery of the abdominal wall and clinically meaningful benefit. What are we talking about?<sup>☆</sup>



Cirugía mínimamente invasiva de la pared abdominal y beneficio clínicamente significativo. ¿De qué estamos hablando?

Excluding inguinal hernias, the repair of abdominal wall defects with mesh using a minimally invasive (MI) approach has undergone a revolution in the last decade. The improvement in the knowledge of the technique and of the anatomy means that not only the intraperitoneal approach (ie, laparoscopic) is contemplated, but the extraperitoneal approach (ie, endoscopic) has also been introduced. In this context, a surgeon has in his MI therapeutic arsenal, on the one hand, intraperitoneal approaches such as the IPOM1 technique, the IPOM plus<sup>2</sup> technique, the transabdominal preperitoneal technique,3 the retrorectal transperitoneal technique (Rives-Stoppa), the LIRA or the TAR technique, in addition to extraperitoneal approaches such as the eTEP-RS technique (Rives-Stoppa), the MILOS technique, eTEP-TAR9, the SCOLA technique, 10 the ELAR technique 11 or the endoscopic separation of components. 12 Furthermore, if the Da Vinci® robotic platform (Intuitive) is available, the vast majority of the previously mentioned procedures can be performed with it, both intraperitoneal and extraperitoneal.

It is not surprising then that, given this 'wave' of techniques, a surgeon who wants to perform an MI approach for the abdominal wall may have doubts regarding the best technique option for a patient and may wonder if all provide a 'clinically significant benefit'. It is difficult to precisely define what a 'clinically significant benefit' means: something seen from the perspective of a surgeon?, from the perspective of an individual surgeon or a group of surgeons?, from the perspective of the patient?, the perspective of an individual patient or of a group of patients?, from the administrator's perspective?, from the politician's perspective?, or from the perspective of other professional groups involved in patient care, such as nursing staff or anesthetists?

It is not my intention to debate these issues here. Others have previously attempted to clarify<sup>13</sup> what 'clinically significant benefit' means by highlighting that among the complexities surrounding the notion of this idea, a fundamental confusion is the merging of two different and equally important types of significant change. On the one hand, the concept of change that is perceptible to the patient or caregiver, and on the other hand the concept of change that is considered valuable by the patient or caregiver. In the context of MI surgery of the abdominal wall (without forgetting that this surgery is overwhelmingly performed in 'benign' settings, with implications for the patient, surgeon and society), a perceptible change is something appreciable (disappearance of the 'lump', aesthetic improvement, functional improvement, disappearance of symptoms). A valuable change is something useful, which 'was worth it' (fewer short- and long-term complications, shorter hospital stay, less acute or chronic pain) or perhaps simply that the patient perceives it as 'better' or more 'effective' compared to previous procedures.

In my opinion, the 'clinically significant benefit' of wall surgery may be inevitably linked to a *perceptible* change, but above all it is imperative and perhaps mandatory that it be linked to a *valuable* change for the patient. In any case, and from our point of view, these thoughts on the 'clinically significant benefit' are nothing more than providing an opinion from another perspective of evidence-based surgery, which, it should be remembered here, is based on its definition in three basic columns: first, the data present in the literature on a specific topic; second, the surgeon's knowledge of these data combined with her/his own experience of the subject in question (in this case, MI surgery of the abdominal wall), and

<sup>\*</sup> Please cite this article as: López Cano M. Cirugía mínimamente invasiva de la pared abdominal y beneficio clínicamente significativo. ¿De qué estamos hablando? Cir Esp. 2021;99:171–173.

the third, the patient's values and preferences regarding the wall defect.

All the new MI techniques that are currently available in abdominal wall surgery require data collection for their results in the short, medium and long term. Surgeons should be aware of the results of these techniques so that, in the end, after discussing with the patient the characteristics of the process and the potential benefits and disadvantages of the different therapeutic options, the latter can make a decision based on values and preferences and in the context of a shared decision. 14 The shared decision can be seen as a mechanism for presenting evidence to an individual patient in order to personalize the clinical decision. It is a continuum, along which the extent to which the patient or surgeon takes responsibility for the decision-making process varies: at the extremes are decisions led by surgeons and decisions made by patients, with many other possibilities in between.

In my opinion, the best setting for evidence-based MI abdominal wall surgery is in the context of specialized units, 15 which should be accredited or certified by a society interested in abdominal wall problems (nationally or internationally). These units should perform a higher volume of cases in all types of wall surgery compared to an average general surgery department, and they should be made up of experienced abdominal wall surgeons for all types of wall surgery recommended in the guidelines. Furthermore, these surgeons should be responsible for wall surgery education and training in their department, and they should treat patients in accordance with current guidelines and scientific recommendations. Each case should be documented prospectively in a quality control registry or database and, of course, surgeons must follow-up their patients to compare their own results with the reference data to with the aim of continuously improving their treatments. This guarantees their contribution to the research in the therapeutics of abdominal wall problems.

Reading these lines, some surgeons may think that specialized units cannot be organized in their hospitals given the particular 'care' characteristics, and that wall surgery in their hospitals will only be performed by surgeons with 'special interest'. However, even in these cases, those surgeons with 'special interest' should be accredited, trained and habitually register data. There is probably a way to go in all of these facets of abdominal wall surgery. Even so, I believe that only in this way will it be possible to answer that MI techniques have a 'clinically significant benefit' in abdominal wall surgery with a perceptible effect, of course, but one that is above all valuable for our patients.

## REFERENCES

 LeBlanc K, Booth W. Laparoscopic repair of incisional abdominal hernias using expanded polytetrafluoroethylene: preliminary findings. Surg Laparosc Endosc. 1993;3(1):39–41.

- Chelala E, Baraké H, Estievenart J, Dessily M, Charara F, Allé JL. Long-term outcomes of 1326 laparoscopic incisional and ventral hernia repair with the routine suturing concept: a single institution experience. Hernia. 2016;20(1):101–10. http://dx.doi.org/10.1007/s10029-015-1397-y.
- 3. Prasad P, Tantia O, Patle NM, Khanna S, Sen B. Laparoscopic transabdominal preperitoneal repair of ventral hernia: a step towards physiological repair. Indian J Surg. 2011;73(6):403–8. http://dx.doi.org/10.1007/s12262-011-0366-7.
- Schroeder AD, Debus ES, Schroeder M, Reinpold WM. Laparoscopic transperitoneal sublay mesh repair: a new technique for the cure of ventral and incisional hernias. Surg Endosc. 2013;27(2):648–54. <a href="http://dx.doi.org/10.1007/s00464-012-2508-9">http://dx.doi.org/10.1007/s00464-012-2508-9</a>.
- Gómez-Menchero J, Guadalajara Jurado JF, Suárez Grau JM, Bellido Luque JA, García Moreno JL, Alarcón Del Agua I, et al. Laparoscopic intracorporeal rectus aponeuroplasty (LIRA technique): a step forward in minimally invasive abdominal wall reconstruction for ventral hernia repair (LVHR). Surg Endosc. 2018;32(8):3502–8. <a href="http://dx.doi.org/10.1007/s00464-018-6070-v">http://dx.doi.org/10.1007/s00464-018-6070-v</a>.
- Belyansky I, Zahiri HR, Park A. Laparoscopic Transversus Abdominis Release, a Novel Minimally Invasive Approach to Complex Abdominal Wall Reconstruction. Surg Innov. 2016;23(2):134–41. <a href="http://dx.doi.org/10.1177/">http://dx.doi.org/10.1177/</a> 1553350615618290.
- Belyansky I, Daes J, Radu VG, Balasubramanian R, Reza Zahiri H, Weltz AS, et al. A novel approach using the enhancedview totally extraperitoneal (eTEP) technique for laparoscopic retromuscular hernia repair. Surg Endosc. 2018;32(3):1525–32. http://dx.doi.org/10.1007/s00464-017-5840-2.
- Reinpold W, Schroöder M, Schroöder A, Berger C, Nehls J, Stoltenberg W, et al. Minimally invasive sublay mesh repair of incisional and primary abdominal wall hernias using the MILOS technique. Eur Surg. 2017;49:59–64.
- Baig SJ, Priya P. Extended totally extraperitoneal repair (eTEP) for ventral hernias: Short-term results from a single centre. J Minim Access Surg. 2019;15(3):198–203. <a href="http://dx.doi.org/10.4103/jmas.JMAS\_29\_18">http://dx.doi.org/10.4103/jmas.JMAS\_29\_18</a>.
- Claus CMP, Malcher F, Cavazzola LT, Furtado M, Morrell A, Azevedo M, et al. Subcutaneous onlay laparoscopic approach (SCOLA) for ventral hernia and rectus abdominis diastasis repair: technical description and initial results. Arq Bras Cir Dig. 2018;31(4):e1399. <a href="http://dx.doi.org/10.1590/0102-672020180001e1399">http://dx.doi.org/10.1590/ 0102-672020180001e1399</a>.
- Köckerling F, Botsinis MD, Rohde C, Reinpold W, Schug-Pass C. Endoscopic-assisted linea alba reconstruction: New technique for treatment of symptomatic umbilical, trocar, and/or epigastric hernias with concomitant rectus abdominis diastasis. Eur Surg. 2017;49(2):71–5. <a href="http://dx.doi.org/10.1007/s10353-017-0473-1">http://dx.doi.org/10.1007/s10353-017-0473-1</a>.
- 12. Lowe JB, Garza JR, Bowman JL, et al. Endoscopically assisted "components separation" for closure of abdominal wall defects. Plast Reconstr Surg. 2000;105(2):720.
- Weinfurt KP. Clarifying the Meaning of Clinically Meaningful Benefit in Clinical Research: Noticeable Change vs Valuable Change. JAMA. 2019. <a href="http://dx.doi.org/10.1001/jama.2019.18496">http://dx.doi.org/10.1001/jama.2019.18496</a>.
- 14. Ubbink DT, Hageman MG, Legemate DA. Shared Decision-Making in Surgery. Surg Technol Int. 2015;26:31–6.
- Köckerling F, Sheen AJ, Berrevoet F, Campanelli G, Cuccurullo D, Fortelny R, et al. Accreditation and certification requirements for hernia centers and surgeons: the ACCESS project. Hernia. 2019;23(2):185–203. <a href="http://dx.doi.org/10.1007/s10029-018-1873-2">http://dx.doi.org/10.1007/s10029-018-1873-2</a>.

\*Corresponding author.

E-mail address: mlpezcano@gmail.com

2173-5077/

© 2020 AEC. Published by Elsevier España, S.L.U. All rights reserved.

Manuel López Cano<sup>a,b,c</sup>
<sup>a</sup>Profesor Titular de Cirugía, Universidad Autónoma de Barcelona,
Barcelona, Spain

<sup>b</sup>Coordinador de la Unidad de Cirugía de la Pared Abdominal, Hospital Universitario Vall d'Hebron, Barcelona, Spain <sup>c</sup>Coordinador de la Sección de Pared Abdominal de la Asociación Española de Cirujanos (AEC), Spain