

3. Jackson SE, Maslach C, Leiter M. Maslach burnout inventory manual. Menlo Park, CA: Mind Garden; 2016.

\*Corresponding author.

E-mail address: [alvaronavarrobarrios@gmail.com](mailto:alvaronavarrobarrios@gmail.com)  
(Á. Navarro-Barrios).

Álvaro Navarro-Barrios<sup>a,\*</sup>, María José Cubillana-Martínez<sup>b</sup>

2173-5077/

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

<sup>a</sup>Servicio de Cirugía General y del Aparato Digestivo, Hospital Universitario Virgen de la Arrixaca, Murcia, Spain

<sup>b</sup>Servicio de Medicina Familiar y Comunitaria, Área I-Murcia Oeste, Hospital Universitario Virgen de la Arrixaca, Murcia, Spain

6 November 2020

## Laparoscopic pancreaticoduodenectomy: May we illuminate some shadows?☆



## Duodenopancreatectomía cefálica laparoscópica: ¿podemos iluminar algunas sombras?

Dear Editor,

We have read the recent article by Espín Álvarez et al., “Highs and Lows in Laparoscopic Pancreaticoduodenectomy”.<sup>1</sup> First of all, we would like to congratulate the authors, not only for the results presented, but for their thoughts on such a widely debated topic: the incorporation into clinical practice of such a demanding procedure as minimally invasive pancreaticoduodenectomy (PD).<sup>2</sup>

When faced with this challenge in our unit, the safety of our patients was paramount.<sup>3</sup> Being aware of the Achilles’ heel involved in performing pancreatic anastomosis, we designed a strategy based on stages that allows us to take advantage of our laparoscopic experience in hepatic and supramesocolic surgery (major and posterior segment hepatectomy, gastrectomy, distal pancreatectomy, splenectomy, etc) for the first phase of PD (laparoscopic phase). Subsequently, the 3 anastomoses are carried out in open surgery through a supraumbilical midline minilaparotomy. With this hybrid surgery concept (laparoscopic/laparotomic),<sup>4</sup> we have operated on our first 10 patients in 2019, whose median hospital stay was 6 days (5–10); there was only one case of readmission for grade C fistula (unpublished data) and no 90-day mortality. In the laparotomic phase, we always perform the pancreatic division and the release of the retroportal lamina for better control of the drainage veins from the head of the pancreas to the mesenteric-portal trunk. On many occasions, this leads to

non-progression during laparoscopic dissection, requiring conversion, as happened to the authors with one of their patients.

From the results presented, it is striking that the median stay of the group that underwent open PD was almost double the hospital stay for laparoscopic PD (15 vs 8.5 days). Meanwhile, the incidence of complications was only slightly higher (without reaching statistical significance) in the group of patients with open surgery. As the authors well argue, this was probably related to the patient selection, as the patients in the open surgery group had greater technical complexity or comorbidities.

We believe that the possibilities of developing laparoscopic PD in our units should be based on previous experience in open pancreatic surgery, careful patient selection (as shown in recent consensus documents<sup>5,6</sup>), specific training programs for the procedure,<sup>7</sup> and an implementation strategy in which hybrid PD, such as our approach, has a place on the learning curve.<sup>8</sup> With this roadmap, perhaps we can illuminate and eliminate some of the shadows that still haunt us.

### REFERENCES

1. Espín Álvarez F, García Domingo MI, Cremades Pérez M, Herrero Fonollosa E, Navinés López J, Camps Lasa J, et al.

☆ Please cite this article as: Suárez Muñoz MÁ, Roldán de la Rúa JF, Hinojosa Arco LC, Eslava Cea Y. Duodenopancreatectomía cefálica laparoscópica: ¿podemos iluminar algunas sombras? Cir Esp. 2021;99:249–250.

- Luces y sombras de la duodenopancreatectomía cefálica laparoscópica. *Cir Esp.* 2020. <http://dx.doi.org/10.1016/j.ciresp.2020.07.005>.
2. Fuks D. Minimally invasive pancreatoduodenectomy. *Br J Surg.* 2020;107:630–1. <http://dx.doi.org/10.1002/bjs.11569>.
  3. Suárez Muñoz MA. Complicaciones y secuelas de la cirugía pancreática ¿Cómo intentamos prevenirlas? *Cir Andal.* 2019;30:181–5.
  4. Roldán de la Rúa JF, Hinojosa Arco LC, Ávila García NS, Ramos Muñoz F, Martos Rojas N, Eslava Cea Y, et al. Duodenopancreatectomía cefálica mediante abordaje híbrido (laparoscópico/laparotómico). *Cir Esp.* 2019;97(Espec Congr 2):6.
  5. Edwin B, Sahakyan MA, Abu Hilal M, Besselink MB, Braga M, Fabre JM, et al. Laparoscopic surgery for pancreatic neoplasms: the European association for endoscopic surgery clinical consensus conference. *Surg Endosc.* 2017;31:2023–41. <http://dx.doi.org/10.1007/s00464-017-5414-3>.
  6. Asbun HJ, Moekotte AL, Vissers FL, Kunzler F, Cipriani F, Alseidi A, et al. The Miami international evidence-based guidelines on minimally invasive pancreas resection. *Ann Surg.* 2020;271:1–14. <http://dx.doi.org/10.1097/SLA.0000000000003590>.
  7. De Rooij T, van Hilst J, Topal B, Bosscha K, Brinkman DJ, Gerhards MF, et al. Outcomes of a Multicenter Training Program in Laparoscopic Pancreatoduodenectomy (LAELAPS-2). *Ann Surg.* 2019;269:344–50. <http://dx.doi.org/10.1097/SLA.0000000000002563>.
  8. Pham H, Nahm CB, Hollands M, Pang T, Johnston E, Pleass H, et al. Hybrid laparoscopic pancreaticoduodenectomy: an Australian experience and a proposed process for implementation. *ANZ J Surg.* 2020;90:1422–7. <http://dx.doi.org/10.1111/ans.15802>.
- Miguel Ángel Suárez Muñoz\*, Jorge Francisco Roldán de la Rúa, Luis Carlos Hinojosa Arco, Yolanda Eslava Cea
- Unidad de Cirugía Hepatobiliopancreática, Hospital Universitario Virgen de la Victoria, Málaga, Spain
- \*Corresponding author.  
E-mail address: [masuarez59@gmail.com](mailto:masuarez59@gmail.com) (M.Á. Suárez Muñoz).
- 2173-5077/  
© 2021 Published by Elsevier España, S.L.U. on behalf of AEC.

## Response to the Letter to the Editor on the article “Highs and lows in laparoscopic pancreaticoduodenectomy”<sup>☆</sup>



## Respuesta a la Carta al Director relativa al artículo «Luces y sombras de la duodenopancreatectomía cefálica laparoscópica»

To the Editor

First of all, we thank you for the opportunity to reply to the Letter to the Editor by Suarez Muñoz et al<sup>1</sup> under the title “Laparoscopic cephalic pancreatoduodenectomy: May we illuminate some shadows?”, in reference to the article on laparoscopic pancreaticoduodenectomy.<sup>2</sup>

Second, we the authors would like to thank them for their interest and comments in the aforementioned Letter to the Editor. Undoubtedly, this concern regarding safety in pancreaticoduodenectomy is shared between both groups, which is reflected in the experiences published.<sup>3</sup> It is not necessary to re-emphasize the high complexity of pancreatic surgery, especially pancreaticoduodenectomy, which requires special involvement from the onset of symptoms and diagnosis

through preoperative management, as well as early detection and anticipation in the appearance of complications. All of this requires special thoroughness from all those involved, especially the surgical teams.

We fully agree that experience in hepatobiliary-pancreatic surgery, as well as previous planning of cases, planned conversions or hybrid surgery, are key in the learning curve of laparoscopic pancreaticoduodenectomy, always with patient safety as the main objective. At the same time, we must also guarantee the standards of oncological surgery and a rapid recovery that does not hinder completing adjuvant treatment.

What is currently being debated is the actual number of cases required to overcome the learning curve using an approach by stages,<sup>4,5</sup> or even the need to institute adequate accreditation and quality control measures, prior to routine

DOI of original article: <http://dx.doi.org/10.1016/j.ciresp.2020.11.014>

<sup>☆</sup> Please cite this article as: Espin Alvarez F, García Domingo MI, Cremades Pérez M, Cugat Andorrá E. Respuesta a la Carta al Director relativa al artículo «Luces y sombras de la duodenopancreatectomía cefálica laparoscópica». *Cir Esp.* 2021;99:250–251.