World J Surg (2023) 47:1335
https://doi.org/10.1007/s00268-023-06919-4

REPLY, LETTER TO THE EDITOR

Author´s Reply: Conversion from Laparoscopic to Open Appendectomy: Trends, Risk Factors and Outcomes. A 15-year single-center analysis of 2193 patients

Manuela Monrabal Lezama[1] · **Francisco Schlottmann**[1]

Accepted: 7 January 2023 / Published online: 23 January 2023
© The Author(s) under exclusive licence to Société Internationale de Chirurgie 2023

We have read with interest the letter to the editor submitted by Centea and colleagues commenting on our recently published article regarding risk factors for conversion in patients undergoing laparoscopic appendectomy [1]. Some important points and questions were raised by the authors. First, the total number of laparoscopic appendectomies was indeed included in the manuscript (n = 2193 in the period 2006–2020), and thereby the trends on conversion were calculated analyzing the percentage of conversions in each year. In terms of the diagnosis of acute appendicitis, an abdominal ultrasound is always performed; a CT scan is only requested when the clinical picture (physical examination and ultrasound) is inconclusive. For instance, in our series around 20% of the patients underwent a CT scan. We believe a 5% of negative appendectomies is still acceptable [2].

The level of supervision of residents in the operating room is a very interesting matter. In our center, the surgical team on a laparoscopic appendectomy includes an intern, a senior resident, and an attending surgeon. The intern (first year resident) always starts the case; in complex cases due to the grade of appendicitis or multiple intraabdominal adhesions the senior resident promptly takes over. The decision of conversion is ultimately taken by the attending in charge of the case.

Medical treatment of acute appendicitis has been advocated in previous studies [3, 4]. We do not have experience in non-surgical management of these patients, and this has not changed overtime. Even during the COVID-19 pandemic, we operated on all patients with diagnosis of acute appendicitis.

Regarding the trends on conversion, we did not adopt statistical process control charts. We do believe this tool could be useful for future studies. A linear regression model was used to analyze the relationship between the rates of conversion and time. The higher percentage rate of conversion in 2020 was likely related to the management of more advanced presentations during the pandemic (there was often a delay on consultation by the patients due to the stay home policy) [5].

Declarations

Conflict of interest Manuela Monrabal Lezama and Francisco Schlottmann have no conflict of interest, financial ties or funding/support to disclose.

References

1. Monrabal Lezama M, Casas MA, Angeramo CA et al (2022) Conversion from laparoscopic to open appendectomy: trends, risk factors and outcomes. A 15-year single-center analysis of 2193 adult patients. World J Surg 46:2642–2647
2. Expert Panel on Gastrointestinal Imaging, Kambadakone AR, Santillan CS, Kim DH et al (2022) ACR appropriateness criteria® right lower quadrant pain: 2022 Update. J Am College Radiol; JACR, 19(11S), S445–S461.
3. Salminen P, Paajanen H, Rautio T et al (2015) Antibiotic therapy vs. appendectomy for treatment of uncomplicated acute appendicitis: the APPAC randomized Clinical trial. JAMA 313(23):2340–2348
4. Collaborative CODA, Flum DR, Davidson GH, Monsell S et al (2020) A randomized trial comparing antibiotics with appendectomy for appendicitis. N Engl J Med 383(20):1907–1919
5. Angeramo CA, Dreifuss NH, Schlottmann F et al (2021) More severe presentations of acute appendicitis during COVID-19. J Gastrointest Surg: Off J Soc Surg Aliment Tract 25(7):1902–1904

Publisher's Note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

✉ Francisco Schlottmann
fschlottmann@hotmail.com

[1] Department of Surgery, Hospital Alemán of Buenos Aires, 1640 Pueyrredon Ave, Buenos Aires, Argentina