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Editorial

Why are we so sceptical about the omission of antibiotics in patients with acute uncomplicated diverticulitis?

¿Por qué somos tan escépticos sobre la omisión de antibióticos en pacientes con diverticulitis aguda no complicada?

A nationwide survey recently published in *Cirugía Española* included 104 participants, representing approximately two thirds of the units accredited in Spain for colorectal surgery.[1] The authors found that at only 23% of centres surgeons would consider not prescribing antibiotics for acute uncomplicated diverticulitis (AUD) of the colon. The authors found such finding appalling, as evidence has been accumulating that omitting antibiotics under such circumstances would not result in worse outcomes.[1,2] Some considerations are therefore needed to try and explain the reluctancy to adopt a strategy that has been proven.

There are no universally agreed criteria or consistent definitions of AUD. This would be the first area for improvement. Several classifications have been suggested, but some of them are not easy to use routinely. Also, there are grey areas in clinical practice that makes it difficult to assign patients unequivocally to a specific group. For example, the presence of small amounts of gas even without a collection would pose the question of which category should this condition belong to.[3]

Indeed, the number of randomised controlled trials (RCTs) that are available represents a true goldmine as compared with other diseases in which it is difficult to obtain such high-quality evidence; at least, one would think. The authors mentioned several RCTs and metanalyses comparing the outcomes of patients who received *versus* those who did not receive antibiotics for AUD, showing that omitting antibiotics was safe.[2] Of note, evidence spans over a reasonable timeframe and consists of data from patients treated at different countries. So, why are these studies being treated like *Cassandras*?

Barriers to the adoption of antibiotic-sparing policies in AUD can be argued from recently published articles. An interesting study published in 2023[4] investigated the factors that influenced the choice of surgeons to keep prescribing antibiotics in AUD. Most respondents were concerned that treatment could fail. This raises concerns but could be explained by the raising pressure towards physicians in terms of medical litigation and malpractice and could probably fit in the category of "defensive medicine".[5] This seems to be in line with the fear of medical claims and the fact that almost 50% of surgeons felt that patients would have preferred receiving antibiotics.[4]

There are factors that need to be tackled by local or national health governance, for example access to CT scan and availability of expert radiologists to interpret the findings. Also, the possibility to have strict follow-up and remote monitoring. In the era of telemedicine,[6] there are plenty of opportunities to implement technology into an antibiotic-free pathway.

What is concerning – and, yes it is something we surgeons should work hard to overcome – are the other obstacles reported in the study. Unnecessary antibiotic treatment can increase resistance and long-term infectious complications.[7] Antibiotic resistance is one of the most threatened issues of our times, and as surgeons we have the responsibility not to contribute to this. Having evidence that sparing antibiotics for AUD is safe, might make antimicrobial therapy unethical. In addition, avoiding admission for IV antibiotic treatment or the prescription of oral antibiotics is likely to result in a more sustainable policy. This is not irrelevant, at a time when surgeons are realising that our treatments impact the environment.[8] We should aim for reducing the amount of waste produced, hospital stay and attendance, and hopefully future admissions or advanced antimicrobial treatment due to antibiotic resistance. These actions would likely play a significant role in preserving the environment, without impacting the health of patients.

Indeed, the study is far from being perfect,[1] as it represents the opinions of respondents. However, it shed light on an issue that needs immediate action. Lack of knowledge and workplace culture are something that everyone of us can

work to improve. This study highlighted the lack of compliance with international recommendations, and it is crucial to see it published in the official publication of *Asociación Española de Cirujanos* (AEC). This should be the starting point of a critical revision of the management of AUD, in order to implement evidence-based practices at a national level. The AEC has the duty to provide surgeons with adequate information and reassurance that such policy is not only safe but warranted. This could be a major undertaking, but it is no different from quality-improvement initiatives that the AEC has taken forward.[9] This would seem a necessary investment of resources and would benefit a relevant number of patients. Better definition of the disease is probably needed.[3] It is important to consider that guidelines are not to be dogmatically used in clinical practice, at least in areas where the quality and quantity of evidence is suboptimal.[10] Therefore, societies could start initiatives to monitor the actual outcomes of non-antibiotic treatment for AUD. In fact, collecting real-life data, which are usually easier to apply in everyday life and more representative of the population of patients compared to the selected populations of RCTs, could probably convince those sceptical respondents. Additional measures that societies and governments could consider include the dissemination/translation of national and international guidelines, local events, and online webinars. All resources that are available in Spain and well attended by Spanish surgeons.

Lastly, an aspect that needs to be considered is to involve patients in what seems like a Copernican revolution of AUD treatment. This means that the integration of patients in the development of training events, guidelines, real-life studies, and in the dissemination of their findings would likely result in a shift in the culture and attitudes towards the use of antibiotics. It would also reduce litigations and strengthen the relationship between surgeons and the public. The AEC has recently started a commission in charge of the communication and relationship with patients; this and similar initiatives represent useful tools to make a change in areas where no adherence with available evidence is found. We surgeons are to work on this with patients, but we need to be backed by scientific societies and the governments.

Conflicts of interest

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REFERENCES

1. Correa Bonito A, Cerdán Santacruz C, Pellino G, Fernández Miguel T, Bermejo Marcos E, Rodríguez Sánchez A, et al. Results of a national survey about the management of patients with acute uncomplicated diverticulitis. Cir Esp (Engl Ed). 2024;102(4):202–8. http://dx.doi.org/10.1016/j.cireng.2023.11.023.
2. Mohamedahmed AY, Zaman S, Das N, Kakaniaris G, Vakis S, Eccersley J, et al. Systematic review and meta-analysis of the management of acute uncomplicated diverticulitis: time to change traditional practice. Int J Colorectal Dis. 2024;39(1):47. http://dx.doi.org/10.1007/s00384-024-04618-7.
3. Tejedor P, Pastor C, Pellino G, Di Saverio S, Gorter-Stam M, Sylla P, et al. Management of acute diverticulitis with pericolic free gas (ADIFAS): an international multicenter observational study. Int J Surg. 2023;109(4):689–97. http://dx.doi.org/10.1097/JS9.0000000000000213.
4. Brière R, Benhamed A, Émond M, Blanchard PG, Drolet S. Evaluation of physicians' current practices and awareness regarding the treatment of acute uncomplicated diverticulitis: results of a provincial survey. CJEM. 2023;25(12):968–75. http://dx.doi.org/10.1007/s43678-023-00606-y.
5. Pellino IM, Pellino G. Consequences of defensive medicine, second victims, and clinical-judicial syndrome on surgeons' medical practice and on health service. Updates Surg. 2015;67(4):331–7. http://dx.doi.org/10.1007/s13304-015-0338-8.
6. Sánchez-Guillén L, Lillo-García C, Barber X, González-Mora C, Álvarez-Gallego M, Ioannidis A, et al. Patients' perception of using telehealth for consultation: insights after pandemic and development of an online calculator platform to predict acceptance of remote consultation: the TELEMED international study. Updates Surg. 2024. http://dx.doi.org/10.1007/s13304-024-01780-z.
7. Grau S, Fondevilla E, Freixas N, Mojal S, Sopena N, Bella F, et al. Relationship between consumption of MRSA-active antibiotics and burden of MRSA in acute care hospitals in Catalonia, Spain. J Antimicrob Chemother. 2015;70(4):1193–7. http://dx.doi.org/10.1093/jac/dku487.
8. Cunha MF, Pellino G. Environmental effects of surgical procedures and strategies for sustainable surgery. Nat Rev Gastroenterol Hepatol. 2023;20(6):399–410. http://dx.doi.org/10.1038/s41575-022-00716-5.
9. Codina Cazador A, Biondo S, Espin Basany E, Enriquez-Navascues JM, Garcia-Granero E, Roig Vila JV, et al. Oncological results of the educational Rectal Cancer Project in Spain 10 years after its implementation. Cir Esp. 2017;95(10):577–87. http://dx.doi.org/10.1016/j.ciresp.2017.08.007.
10. Podda M, Ceresoli M, Di Martino M, Ortenzi M, Pellino G, Pata F, et al. Towards a tailored approach for patients with acute diverticulitis and abscess formation. The DivAbsc2023 multicentre case-control study. Surg Endosc. 2024;38(6):3180–94. http://dx.doi.org/10.1007/s00464-024-10793-z.

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