9. Cainzos M, Garcia Riestra C. Infecciones postoperatorias y profilaxis antimicrobiana (capítulo 149). In: Ausina V, Moreno Guillén S, editors. Tratado SEIMC de enfermedades infecciosas y microbiología clínica Madrid: Editorial Médica Panamericana S.A.; 2006; p. 1535–42. ISBN: 84-7903-921-3.
10. Caínzos M. Profilaxis antibiótica en cirugía (capítulo 52). In: Drobnic L, editor. Tratamiento antimicrobiano Madrid: EMISA; 1997; p. 621–7.
11. Whitman G, Cowell V, Parrisk K, et al. Prophylactic antibiotic use: hardwaring of physician behavior, not education, leads to compliance. J Am Coll Surg. 2008;207:88–94.
12. Condon RE, Wittmann DH. The use of antibiotics in general surgery. Curr Prob Surg. 1991;28:805–949.
13. Burke JF. The effective period of preventive antibiotic action in experimental incisions and dermal lesions. Surgery. 1961;50:161.
14. Fry DE. Antimicrobial bowel preparation for elective colon surgery. Surg Infect. 2016;17:269–74.
15. Malangoni MA. Timing is everything. Ann Surg. 2009;250:17–8.
16. Miranda D, Mermel LA, Dellinger EP. Perioperative antibiotic prophylaxis: surgeons as antimicrobial stewards. J Am Coll Surg. 2020;231:766–9.

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Reply to the Letter 'Reflections on the consensus document on antibiotic prophylaxis in surgery' about to the article 'Executive summary of the Consensus Document of the Spanish Society of Infectious Diseases and Clinical Microbiology (SEIMC) and of the Spanish Association of Surgeons (AEC) in antibiotic prophylaxis in surgery'☆

Respuesta a la Carta al Director «Reflexiones sobre el documento de consenso en profilaxis antibiótica en cirugía», referente al artículo «Resumen ejecutivo del Documento de Consenso de la Sociedad Española de Enfermedades Infecciosas y Microbiología Clínica (SEIMC) y de la Asociación Española de Cirujanos (AEC) en profilaxis antibiótica en cirugía»

We appreciate the opportunity to reply to the Letter to the Director by Prof. Miguel A. Caínzos[1] referring to the Consensus Document of the Spanish Society of Infectious Diseases and Clinical Microbiology (SEIMC) and the Spanish Association of Surgeons (AEC) about antibiotic prophylaxis[2]. Likewise, we want to thank the author for the interesting comments contributed and for the possibility of discussing and clarifying some of the controversial aspects of the article.

We agree with the author on the special relevance of antibiotic prophylaxis to reduce surgical site infection (SSI), which is what prompted the creation of the consensus document, the subject of the comments that we will now respond to:

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1. The consensus project on antibiotic prophylaxis was promoted and funded by the Spanish Society of Infectious Diseases and Clinical Microbiology (SEIMC), which invited the Spanish Association of Surgeons (AEC) to participate. Undoubtedly, the participation of other scientific surgical societies would have been desirable and would have enriched the external validity of the consensus. The conditions under which the aforementioned National Plan for the Control of Surgical Infections (PLANCIR) of the Ministry of Health and Consumption of Spain was drawn up in 1999 facilitates multidisciplinary work, but in our case it was considered a dimension that exceeded the possibilities of the project.
2. The methodology of the document established working groups with members of the SEIMC and AEC for each section of the consensus and gave freedom to the drafting groups to review and include the studies they considered relevant. A bibliographic search between 1970 and 2020 with the terms 'antibiotic prophylaxis' and 'surgery' yielded 12 924 articles, from which the 597 references were selected, which can be consulted in the complete online version of the guidelines (doi: https://doi.org/10.1016/j.eimc.2020.02.017), where complementary information is offered that clarifies some of the doubts that may arise when reading the executive summary. Although articles were reviewed from 1970 on, much of the conclusions were based on the most recent evidence. Undoubtedly, many valuable contributions were left out of this list, some of them generated in our country, which we regret.
3. Among the risk factors that recommend antibiotic prophylaxis in hepatobiliary and pancreatic surgery (discussed in the online version), jaundice is included, although no recommendation is issued on modifications in the type of antibiotic in patients with jaundice. In the presence of some of the risk factors specified in the text, such as emergency procedures for acute situations or cholangitis, antibiotics are administered with the intention to treat and not as prophylaxis. However, we agree with Prof. Caínzos that it would have been preferable to separate simple cholecystectomy from biliary surgery in Table 1 of the article, mentioning the need to increase the spectrum of prophylactic antibiotics in certain situations, given the different flora expected in the presence of risk factors, such as biliary prostheses or previous antibiotic therapy.
4. In contrast, we do not agree in considering elective colorectal surgery 'contaminated' surgery, since it has traditionally been included in Group 2 of the surgical wound classification, referred to as 'potentially contaminated' or 'clean-contaminated' by the CDC in its definition of 1992[3] and its successive updates[4,5]. In one of the first prophylaxis guidelines, Waddell and Rotstein[6] already recommended indicating prophylaxis in ''clean-contaminated procedures'', which involve ''controlled'' access to the digestive tract, such as colorectal surgery. Regarding mechanical preparation and oral antibiotics, the consensus document recommends the use of both measures and their association with intravenous antibiotic prophylaxis, in line with recommendations by Nichols and Condon and mentioned by the author of the letter. This recommendation has been fundamentally supported by numerous recent publications, including randomized studies, meta-analyses and recent observational studies, which in turn are supported by previous knowledge on the subject and the pivotal studies by Condon and other authors in the 1960s and 1970s.
5. We agree with the author on the importance of administering antibiotic prophylaxis as close as possible to the surgical incision and its inclusion in the surgical checklist. However, some of the antibiotics and recommended doses for colorectal or orthopedic surgery require infusion times greater than 30 min, which prevents the start of the infusion in the operating room with the patient already anesthetized. This happens, for example, if you choose to infuse 1500 mg of metronidazole, 1 g of vancomycin or 240 mg of gentamicin. The study by Classen et al. from 1992[7] established the hour prior to the incision as the ideal time for antibiotic infusion. More recently, a systematic review and meta-analysis from 2017[8], which included 54 552 patients from 13 observational cohort studies, redefined a window of 120 min before the incision to administer prophylaxis and was the basis for the recommendation of the SSI prevention guidelines by the WHO[9]. Therefore, the consensus document recommends the infusion of the antibiotic into the surgical area during the two hours prior to the procedure, although probably the 30–60 min prior to the incision are the most recommended.
6. Regarding uncomplicated hernia surgery, it is true that it is clean surgery, which would not require antibiotic prophylaxis in the rare situations in which a prosthesis is not implanted. The online version of the article recalls the controversy that exists about prophylaxis in hernia surgery due to the contradictory results of various meta-analyses. In the meta-analysis by Erdas et al.[10], the use of prophylaxis is discouraged because there is only a decrease in the incidence of superficial and shallow infections, but the authors had excluded studies about laparoscopic surgery, herniorrhaphy without mesh, emergency surgery, pediatric patients, etc., that favored the use of prophylaxis. A prospective registry in Germany, Austria and Switzerland that included 85 033 procedures found that SSI was independently associated with surgical prophylaxis, ASA and the size of the hernia sac in the open surgery subgroup[11].

We would probably agree that, in a young patient without risk factors, in elective clean surgery, where a 20-min surgical time is expected, antibiotic prophylaxis would not be necessary, which would be indicated when there are risk factors. It is true that some of these assumptions can be detected in the preoperative visit (bilateral or recurrent hernia, advanced age, diabetes, obesity), and, although the surgical time cannot be predicted, it can be estimated based on these factors; however, individualized prescription is complex.

Therefore, based on the available evidence and given the difficulty to predict any of the risk factors in the preoperative period, the consensus document recommended prophylaxis in open inguinal herniorrhaphy and hernioplasty. Obviously, at hospitals with an active surveillance system for surgical infection and very low SSI rates, prophylaxis in simple herniorrhaphy could be dispensed with.

Last of all, we agree with Prof Caínzos' comments on prophylaxis in elective cholecystectomy, his reference to Fry's views on mechanical preparation of the colon combined with oral antibiotics, and those of Malangoni or Miranda et al. about the surgeon's responsibility for antibiotic prophylaxis, which coincide with what is recommended in the consensus document.

REFERENCES

1. Caínzos Fernández MA. Reflesiones sobre el documento de consenso en profilaxis antibiótica en cirugía. Cir Esp. 2021;99. http://dx.doi.org/10.1016/j.ciresp.2021.04.001.
2. Del Toro López MD, Arias J, Balibrea JM, et al. Resumen Ejecutivo del Documento de Consenso de la Sociedad Española de Enfermedades Infecciosas y Microbiología Clínica (SEIMC) y de la Asociación Española de Cirujanos (AEC) en profilaxis antibiótica en Cirugía. Cir Esp. 2021;99:11–26.
3. Culver DH, Horan TC, Gaynes RP, et al. Surgical wound infection rates by wound class, operative procedure, and patient risk index National Nosocomial Infections Surveillance System. Am J Med. 1991;91(3B):152S–7S. http://dx.doi.org/10.1016/0002-9343(91)90361-z. PMID: 1656747.
4. Horan TC, Gaynes RP, Martone WJ, Jarvis WR, Emori TG. CDC definitions of nosocomial surgical site infections, 1992: a modification of CDC definitions of surgical wound infections. Infect Control Hosp Epidemiol. 1992;13:606–8.
5. Horan TC, Andrus M, Dudeck MA. CDC/NHSN surveillance definition of health care-associated infection and criteria for specific types of infections in the acute care setting. Am J Infect Control. 2008;36:309–32.
6. Waddell TK, Rotstein OD. Antimicrobial prophylaxis in surgery. Committee on Antimicrobial Agents, Canadian Infectious Disease Society. CMAJ. 1994;151:925–31. PMID: 7922928, PMCID: PMC1337278.
7. Classen DC, Evans RS, Pestotnik SL, Horn SD, Menlove RL, Burke JP. The timing of prophylactic administration of antibiotics and the risk of surgical-wound infection. N Engl J Med. 1992;326:281–6.
8. De Jonge SW, Gans SL, Atema JJ, Solomkin JS, Dellinger PE, Boermeester MA. Timing of preoperative antibiotic prophylaxis in 54,552 patients and the risk of surgical site infection. Medicine. 2017;29(e6903):96.
9. Allegranzi B, Zayed B, Bischoff P, et al. WHO Guidelines Development Group New WHO recommendations on intraoperative and postoperative measures for surgical site infection prevention: an evidence-based global perspective. Lancet Infect Dis. 2016;16:e288–303. http://dx.doi.org/10.1016/S1473-3099(16)30402-9. Epub 2 November 2016. PMID: 27816414.
10. Erdas E, Medas F, Pisano G, Nicolosi A, Calò PG. Antibiotic prophylaxis for open mesh repair of groin hernia: systematic review and meta-analysis. Hernia. 2016;20:765–76.
11. Köckerling F, Bittner R, Jacob D, et al. Do we need antibiotic prophylaxis in endoscopic inguinal hernia repair? Results of the Herniamed Registry. Surg Endosc. 2015;29:3741–9.

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Reply to: Taurine surgery in the 21st century from glory to contempt☆

Respuesta a: «Cirugía taurina en el siglo XXI. De la gloria al desprecio»

To the Editor:

I would like to congratulate Dr. Ríos for the article from January 2021 that provides an overview of bullfighting surgery. I would also like to emphasize some points mentioned in the article on the problem of bullfighting surgery in Spain, which we also share in Mexico: 1) *Loss of social prestige* — not only is there anti-bullfighting activity in Spain, but also in Latin American countries with bullfighting traditions, including Mexico; 2) *Poorly paid professional activity* — it is worth remembering the words of Máximo G[a] de la Torre: "Being a doctor for bullfighters was never financially profitable, but it is an honor." In Mexico, bullring doctors have become doctors who do triage and

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