Infecciones Perioperatorias

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06 Septiembre 2025

INTRODUCCION

- ✓ La infección del sitio operatorio (ISO) es la infección asociada a la atención médica más frecuente después de la cirugía y se asocia con una morbilidad y mortalidad significativas.
- ✓ Se define como una infección relacionada con un procedimiento quirúrgico que ocurre cerca del sitio quirúrgico dentro de los 30 días posteriores a la cirugía (o hasta 90 días posteriores a la cirugía en la que se trata de un implante).
- ✓ La incidencia de ISO varía ampliamente, entre un 5-30 %, según el lugar de la operación y la clasificación de la herida.

Berríos-Torres SI, Umscheid CA, Bratzler DW, et al. Centers for Disease Control and Prevention Guideline for the Prevention of Surgical Site Infection, 2017. JAMA Surg 2017; 152:784.

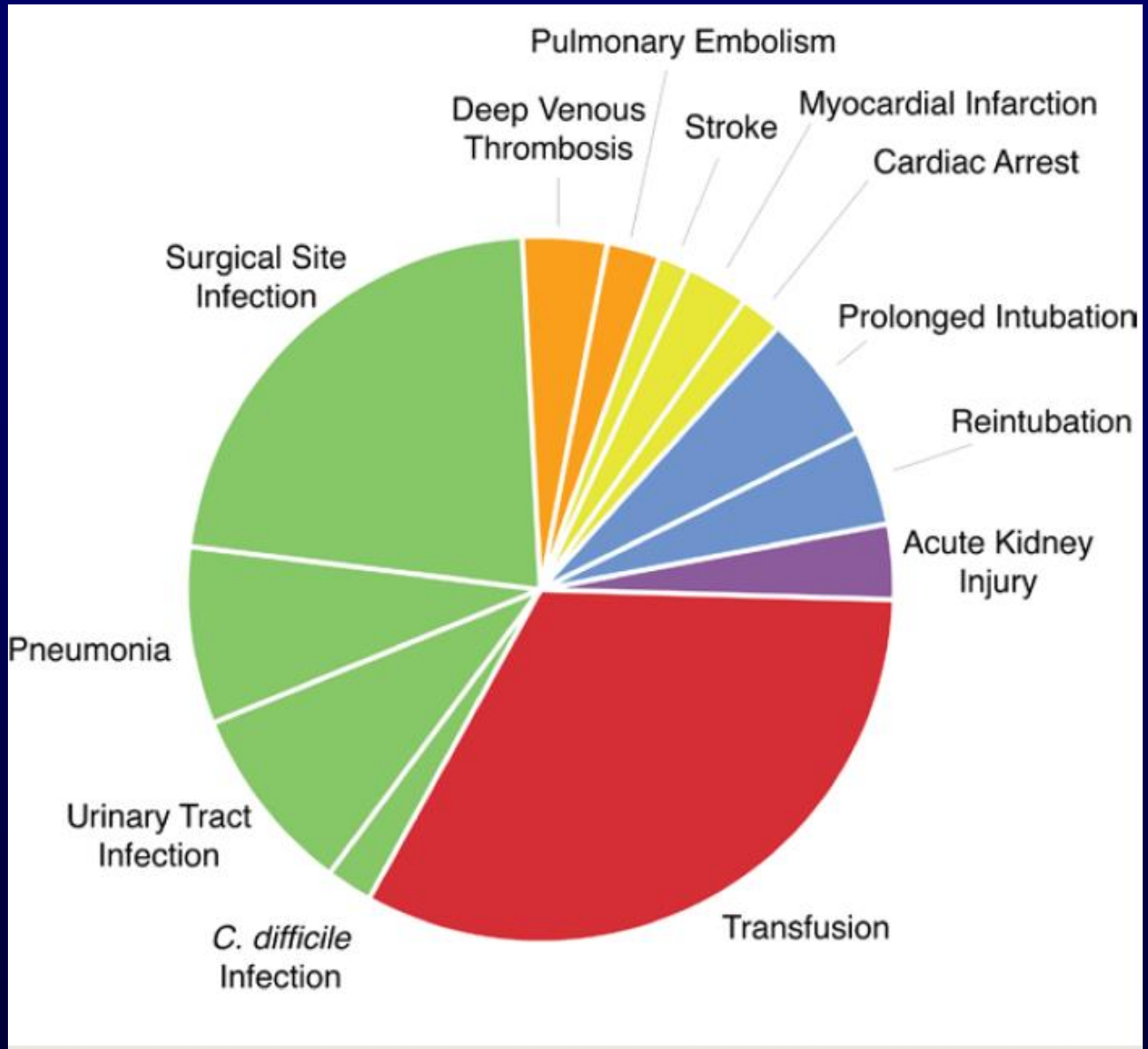


Fig. 1. Relative frequency of adverse perioperative events

Long DR, Alverdy JC, Vavilala MS. Emerging Paradigms in the Prevention of Surgical Site Infection: The Patient Microbiome and Antimicrobial Resistance. Anesthesiology. 2022 Aug 1;137(2):252-262. doi: 10.1097/ALN.0000000000004267

Box

Selected risk factors for postoperative wound infection

Patient-related

- age > 65 years
- prior radiotherapy
- prior skin infection
- diabetes mellitus
- smoking
- obesity (BMI > 30 kg/m2)
- hypoalbuminemia
- nasal colonization with S. aureus
- immunosuppression
- other preoperative infections

Patient-independent

- surgical experience
- long duration of procedure (> 3 hours)
- perioperative blood transfusion
- breach in aseptic technique
- room air technology other than class 1a
- noise (e.g., conversation) in the operating room
- excessive movement of persons through the operating room

Table 1 Risk factors for SSIs

Preoperative risk factors
1. Unmodifiable
   a. Increasing age until age 65 years
   b. Recent radiotherapy and history of skin or soft tissue infection
2. Modifiable
   a. Uncontrolled diabetes
   b. Obesity, malnutrition
   c. Current smoking
   d. Immunosuppression
   e. Preoperative albumin < 3.5 mg/dL
   f. Total bilirubin > 1.0 mg/d
   g. Preoperative hospital stay of at least 2 days

Perioperative risk factors
1. Procedure-related
   a. Emergency and more complex surgery,
   b. Higher wound classification
   c. Open surgery.
2. Facility risk factors
   a. Inadequate ventilation,
   b. Increased operation theatre traffic
   c. Inappropriate/inadequate sterilization of instruments/ equipment.
3. Patient preparation-related
   a. A pre-existing infection
   b. Inadequate antiseptic skin preparation
   c. Preoperative hair removal
   d. Wrong antibiotic choice, administration, and/or duration
4. Intraoperative risk factors
   a. Long operating time
   b. Blood transfusion
   c. Asepsis and surgical technique
   d. Hand/forearm antisepsis and gloving techniques
   e. Hypoxia
   f. Hypothermia
   g. Poor glycaemic control.

Postoperative risk factors
1. Hyperglycaemia and diabetes
2. Postoperative wound care
3. Transfusion

Ling, Moi Lin et al. “APSIC guidelines for the prevention of surgical site infections.” Antimicrobial resistance and infection control vol. 8 174. 12 Nov. 2019, doi:10.1186/s13756-019-0638-8

CRITERIOS CLINICOS

El paciente debe tener al menos uno de los siguientes:

A. Un exudado purulento que drena de un sitio quirúrgico
B. Aislamiento de un microorganismo en el cultivo de un líquido o de un tejido procedente de un sitio quirúrgico (obtenido de forma aséptica)
C. Al menos uno de los siguientes signos o síntomas de infección: dolor o hipersensibilidad al tacto o a la presión, tumefacción localizada, eritema o calor y que la incisión fue abierta deliberadamente por el cirujano.
D. Diagnostico de ISO realizado por el cirujano o medico tratante.

Bratzler DW, Dellinger EP, Olsen KM, et al. Clinical practice guidelines for antimicrobial prophylaxis in surgery. Surg Infect (Larchmt) 2013; 14:73.

MICROBIOLOGIA

- ✓ En la ISO, la fuente más importante de infección es la propia microbiota del paciente.
- ✓ Los microorganismos infectantes dependen del tipo de cirugía, y son los más comunes *Staphylococcus, Streptococcus, y Pseudomonas*.
- ✓ Se han aislado hongos (*Candida albicans*) de un porcentaje cada vez mayor de ISO .

Cohen ME, Salmasian H, Li J, et al. Surgical Antibiotic Prophylaxis and Risk for Postoperative Antibiotic-Resistant Infections.
J Am Coll Surg 2017; 225:631.

Table 3

Selected typical procedure-specific pathogens of postoperative wound infection

Operation	Commonly detected pathogens causing SSI
orthopedic/trauma surgery	*S. aureus (30%), coagulase-negative staphylococci (15%), enterococci (10%)*
endocrine and abdominal wall surgery	*S. aureus (60%), enterococci (20%)*
cardiac and vascular surgery	*S. aureus (25%), coagulase-negative staphylococci (20%), enterococci (10%)*
gastroduodenal procedures	enterococci (30 %), Enterobacterales (30 %)
hepatobiliary surgery	*Enterobacterales (40%), enterococci (30%)*
colorectal surgery, intra-abdominal urological surgery	*Enterobacterales (60%), enterococci (20%), anaerobes (10%)*
thoracic surgery	*Enterobacterales (30%), Pseudomonas (30%), S. aureus (20%)*

Eckmann C, Aghdassi SJS, Brinkmann A, Pletz M, Rademacher J. Perioperative Antibiotic Prophylaxis—Indications and Modalities for the Prevention of Postoperative Wound Infection. Dtsch Arztebl Int. 2024 Apr 5;121(7):233-242. doi: 10.3238/arztebl.m2024.0037

CLINICAL FOCUS REVIEW

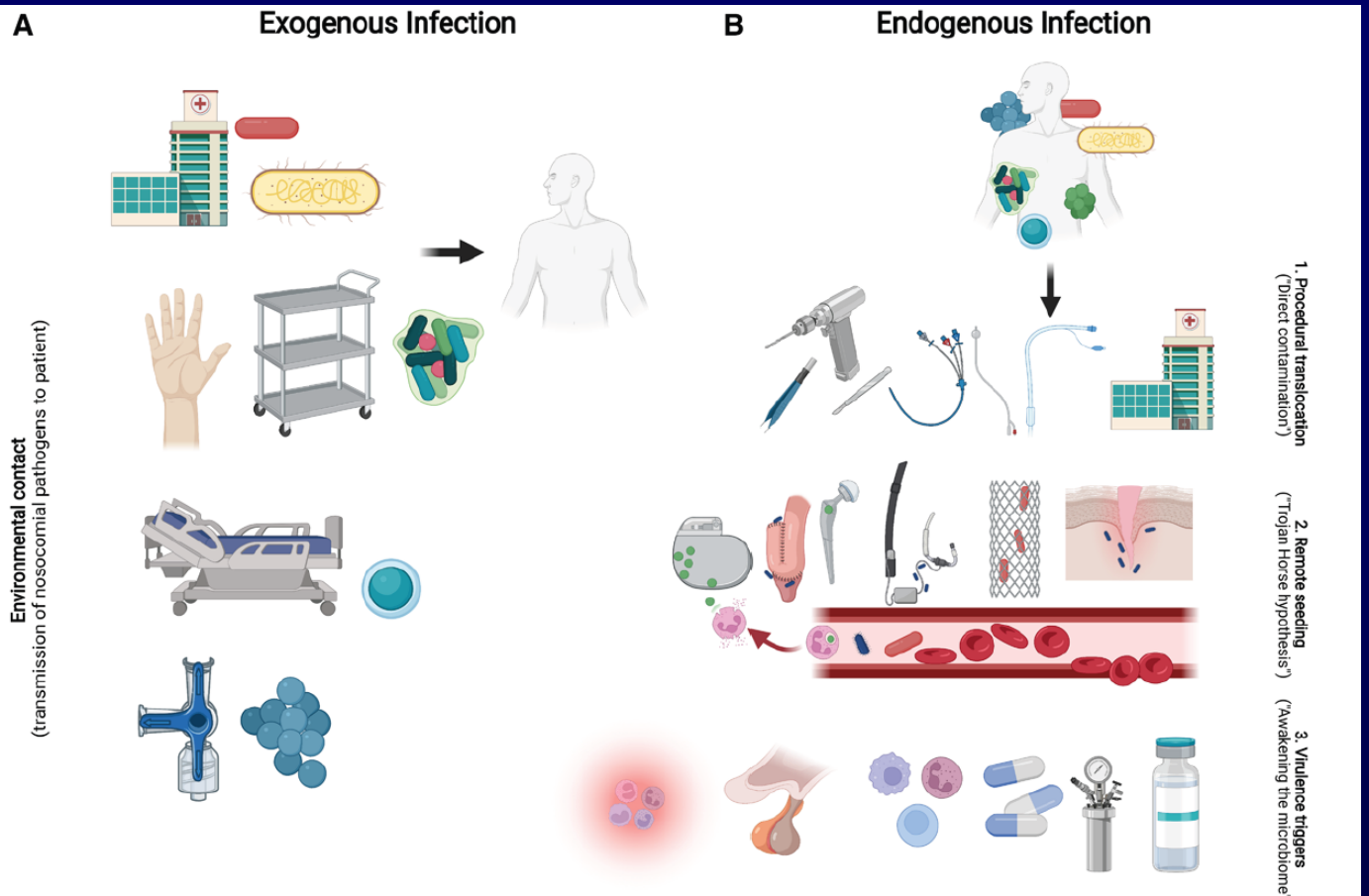
Jerrold H. Levy, M.D., F.A.H.A., F.C.C.M., Editor

Emerging Paradigms in the Prevention of Surgical Site Infection: The Patient Microbiome and Antimicrobial Resistance

DOI: 10.1097/ALN.0000000000004267 AUGUST 2022

Dustin R. Long, M.D., John C. Alverdy, M.D., F.A.C.S., Monica S. Vavilala, M.D.

- ✓ La prevención de SSI requiere ir más allá de la profilaxis antibiótica clásica, integrando la modulación del microbioma y medidas que limiten la resistencia antimicrobiana.
- ✓ A mediano plazo, estrategias personalizadas según microbioma y colonización serán parte de la práctica quirúrgica.



C

Evolution of Surgical Site Infection Prevention Strategies by Route of Infection

	Exogenous	Both	Endogenous
Past	Focus on operating room attire	Increased FIO_2 Avoidance of perioperative glucocorticoids Clean surgical instruments on closing	Mechanical bowel preparation Iodine-based skin antisepsis
Present	Targted surface decontamination Sterile processing Ventilation/airflow Selective use of contact precautions	Hand hygeine Temperature management Glucose control Surgical antibiotic prophylaxis Sterile procedure IV system stewardship	Mechanical & antimicrobial bowel preparation Chlorhexidine-based skin antisepsis Preoperative methicillin-resistant *S. aureus* screening Nasal decolonization Reduced postoperatve prophylaxis
Future	Broad surface decontamination? Single-use devices? Equipment covers? Universal contact precautions?	IV system filtration/sterilization systems? Microbiome-concordant medication selection? Closed incision negative pressure wound therapy? Far-ultraviolet-C light systems?	Antimicrobial-only bowel preparation? Individualized surgical antibiotic prophylaxis? Improved preoperative screening, decolonization? Dietary prehabilitation? Elimination of routine postoperatve prophylaxis? Probiotics and/or fecal autotransplantation?

Fig. 3. Exogenous and endogenous routes of infection and evolving approaches to surgical site infection prevention. Traditional conceptions

PROFILAXIS ANTIMICROBIANA

El objetivo de la profilaxis antimicrobiana es:

- ✓ Prevenir ISO , morbilidad y la mortalidad relacionada.
- ✓ Reducir la duración y el costo de la atención médica.
- ✓ Minimizar los efectos adversos.
- ✓ Tener efectos mínimos para la flora microbiana del paciente y del hospital.

Cohen ME, Salmasian H, Li J, et al. Surgical Antibiotic Prophylaxis and Risk for Postoperative Antibiotic-Resistant Infections.
J Am Coll Surg 2017; 225:631.

Timing of prophylactic antibiotic administration and subsequent rates of SSIs

Time of administration*	Percent with SSI	Odds ratio¶	95% CI
Early	3.8	4.3	1.8-10.4
Preoperative	0.6	1	-
Perioperative	1.4	2.1	0.6-7.4
Postoperative	3.3	5.8	2.4-13.8

SSI: surgical site infection.

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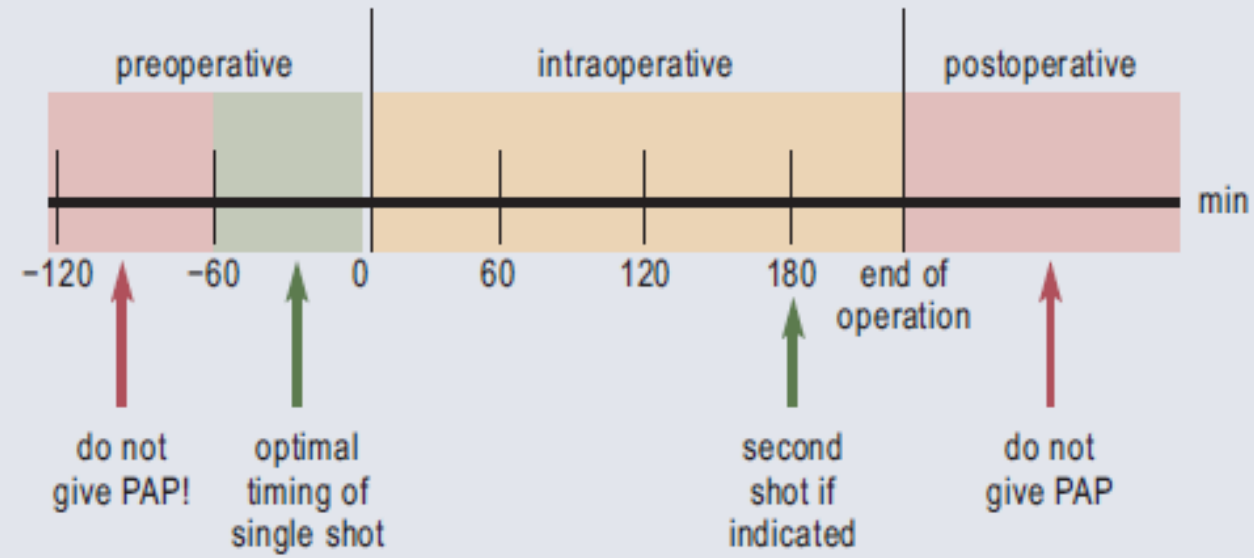
* "Early" denotes 2 to 24 hours before incision, "preoperative" 0 to 2 hours before incision, "perioperative" within 3 hours after incision, and "postoperative" more than 3 hours after incision.

¶ Odds ratio determined by logistic-regression analysis.

Figure



Timeline for the proper implementation of perioperative antibiotic prophylaxis (PAP). (modified from [38])
PAP, perioperative antibiotic prophylaxis

Eckmann C, Aghdassi SJS, Brinkmann A, Pletz M, Rademacher J. Perioperative Antibiotic Prophylaxis—Indications and Modalities for the Prevention of Postoperative Wound Infection. Dtsch Arztebl Int. 2024 Apr 5;121(7):233-242. doi: 10.3238/arztebl.m2024.0037

Review

Pan American Journal of Public Health

Antibiotic prophylaxis for surgical procedures: a scoping review

Eva Brocard,[1,2] Ludovic Reveiz,[2] Jean-Philippe Régnaux,[1] Veronica Abdala,[2] Pilar Ramón-Pardo,[2] and Ana del Rio Bueno[2]

Suggested citation Brocard E, Reveiz L, Régnaux J-P, Abdala V, Ramón-Pardo P, del Rio Bueno A. Antibiotic prophylaxis for surgical procedures: a scoping review. Rev Panam Salud Publica. 2021;45:e62. https://doi.org/10.26633/RPSP.2021.62

TABLE 2. Summary of main findings from the systematic reviews, by the timing of surgical antibiotic prophylaxis administration and the main antibiotics reported

Timing of SAP	No. of SRs	Main antibiotics reported	Key overall results
Preoperative	16	1st and 2nd generation cephalosporin, β-lactams, aminoglycosides, and 2nd generation fluoroquinolones	Compared with placebo or no treatment, preoperative SAP was found to lower SSIs for various surgeries (neurosurgery, cesarean section, urological). One SR investigated appropriate timing of administration and 120 min or less was found to lower postoperative SSI, while more than 120 min increased them.
Intraoperative	10	1st generation cephalosporin, vancomycin, and gentamicin	Results suggest that intraoperative SAP lowers SSI rates and wound infections compared with no antibiotics or a placebo.
Postoperative	10	Amoxicillin/clavulanic, 1st and 2nd generation cephalosporin	Mixed results were found about the impact of postoperative SAP compared with no antibiotics or placebo on SSI, wound infections, and other outcomes. Only 1 SR found a statistically significant reduction in SSI with post SAP, while 6 SRs found none. Results of 3 SRs suggest that post SAP may probably reduce fistula rates, endophthalmitis, and anaphylaxis.
Perioperative	44	1st and 2nd generation cephalosporin, vancomycin, gentamicin, fluoroquinolones, penicillin	High heterogeneity in terms of results. Results corroborated preoperative findings showing that SAP lowers SSI compared with placebo or no treatment. However, findings suggest that SAP prolongation/postoperative did not show a statistically significant difference in terms of SSI and wound infections, compared with preoperative SAP alone.

Note: SAP, surgical antibiotic prophylaxis; SR, systematic review; SSI, surgical site infection.
Source: Prepared by the authors from the study results.

SELECCIÓN ANTIBIOTICO

- ✓ La cefazolina es el ATB de elección para la mayoría de los procedimientos quirúrgicos.
- ✓ Administrar la primera dosis dentro de los 60 minutos anteriores a la incisión quirúrgica.
- ✓ Para vancomicina y fluoroquinolonas, administre la primera dosis dentro de los 120 minutos previos a la incisión quirúrgica debido a tiempos de infusión prolongados.
- ✓ Una sola dosis es suficiente para la mayoría de los procedimientos.
- ✓ Puede ser necesaria una redosificación si la duración de la cirugía es > 4 horas o si la pérdida de sangre es excesiva.
- ✓ Por lo general, se prefiere la vía IV debido a las concentraciones séricas y tisulares rápidas, confiables y predecibles.

Berríos-Torres SI, Umscheid CA, Bratzler DW, et al. Centers for Disease Control and Prevention Guideline for the Prevention of Surgical Site Infection, 2017. JAMA Surg 2017; 152:784.

TABLE 2 - Recommendations for antibiotic prophylaxis for surgical procedures[4,11]

Operation type	Antibiotic recommended	Usual dose in adults (IV)	Dose additional intraoperative	Duration
Herniorraphy with mesh	Cefazolin	<120 kg=2 g /≥120 kg=3 g	4 h	Single dose
Surgery gastroduodenal	Cefazolin	<120 kg=2 g / ≥120 kg=3 g	4 h	Single dose
Surgery biliopancreatic	Cefazolin	<120 kg=2 g / ≥120 kg=3 g	4 h	Single dose
	Cefazolin	2 g	2 h	
	Ampicillin-sulbactam	3 g	2 h	
Appendectomy and colorectal surgery	Cefazolin	2 g	2 h	Duration = 24 h
	Cefazolin	<120 kg=2 g / ≥120 kg=3 g	4 h	
	+			
	Metronidazole	500 mg	NA	
	Ampicillin-sulbactam	3 g	2 h	

IV=intravenous; NA=does not apply; for patients allergic to penicillins and cephalosporins, clindamycin (900 mg) or vancomycin (15 mg/kg IV; do not exceed 2 g) is recommended, with gentamicin (5 mg/kg, IV); or aztreonam (2 g, IV).

Costa ACD, Santa-Cruz F, Ferraz ÁAB. WHAT'S NEW IN INFECTION ON SURGICAL SITE AND ANTIBIOTICOPROPHYLAXIS IN SURGERY? Arq Bras Cir Dig. 2021 Jan 25;33(4):e1558. doi: 10.1590/0102-672020200004e1558

Continuing Medical Education

Perioperative Antibiotic Prophylaxis

Indications and Modalities for the Prevention of Postoperative Wound Infection

Christian Eckmann, Seven Johannes Sam Aghdassi, Alexander Brinkmann,

Dtsch Arztebl Int 2024; 121: 233-42. DOI: 10.3238/arztebl.m2024.0037

- ✓ SSIs representan 25% de las infecciones nosocomiales y ocurren en 1% de cirugías hospitalarias.
- ✓ Riesgo aumentado con obesidad (RR 1.35), inmunosupresión (RR 3.29), cirugía colorrectal (8.4%) vs. prótesis de cadera (4.3%).

Table 2

Proposed indications for perioperative antibiotic prophylaxis depending on the procedure category

Category of procedure	Average SSI rate	Indication for PAP	Illustrative type of operation	Antibiotic (example)
clean, no implant	< 1 %	only with multiple risk factors	thyroidectomy	cefazolin if indicated
clean, with implant, open surgery	1–10 %	yes	total hip replacement	cefazolin
clean, with implant, minimally invasive	1–2 %	only with multiple risk factors	laparoscopic hernia repair	cefazolin if indicated
(clean-) contaminated, open surgery	10–40 %	yes	open colorectal resection	cefuroxime and metronidazole
(clean-) contaminated, minimally invasive	2–10 %	yes	laparoscopic colorectal resection	cefuroxime and metronidazole
(clean-) contaminated, with implant	5–10 %	yes	femorocrural bypass for infected diabetic foot	cefazolin
(clean-) contaminated, mucosal, no implant	< 1 %	only with multiple risk factors	hemorrhoidectomy	cefuroxime and metronidazole if indicated

PAP, perioperative antibiotic prophylaxis; SSI, surgical site infection

- ✓ **Indicaciones claras de PAP:** cirugías con alto riesgo de SSI (colorrectal) o con implantes (artroplastias).
- ✓ **Antibióticos de elección:** cefazolina para la mayoría de procedimientos limpios; cefuroxima + metronidazol en cirugía colorrectal.

Segala *et al. Antimicrobial Resistance and Infection Control* (2020) 9:164
https://doi.org/10.1186/s13756-020-00814-6

Antimicrobial Resistance and Infection Control

RESEARCH Open Access

Antibiotic appropriateness and adherence to local guidelines in perioperative prophylaxis: results from an antimicrobial stewardship intervention

Francesco Vladimiro Segala[1*], Rita Murri[1,2], Eleonora Taddei[1,2], Francesca Giovannenze[1], Pierluigi Del Vecchio[1],

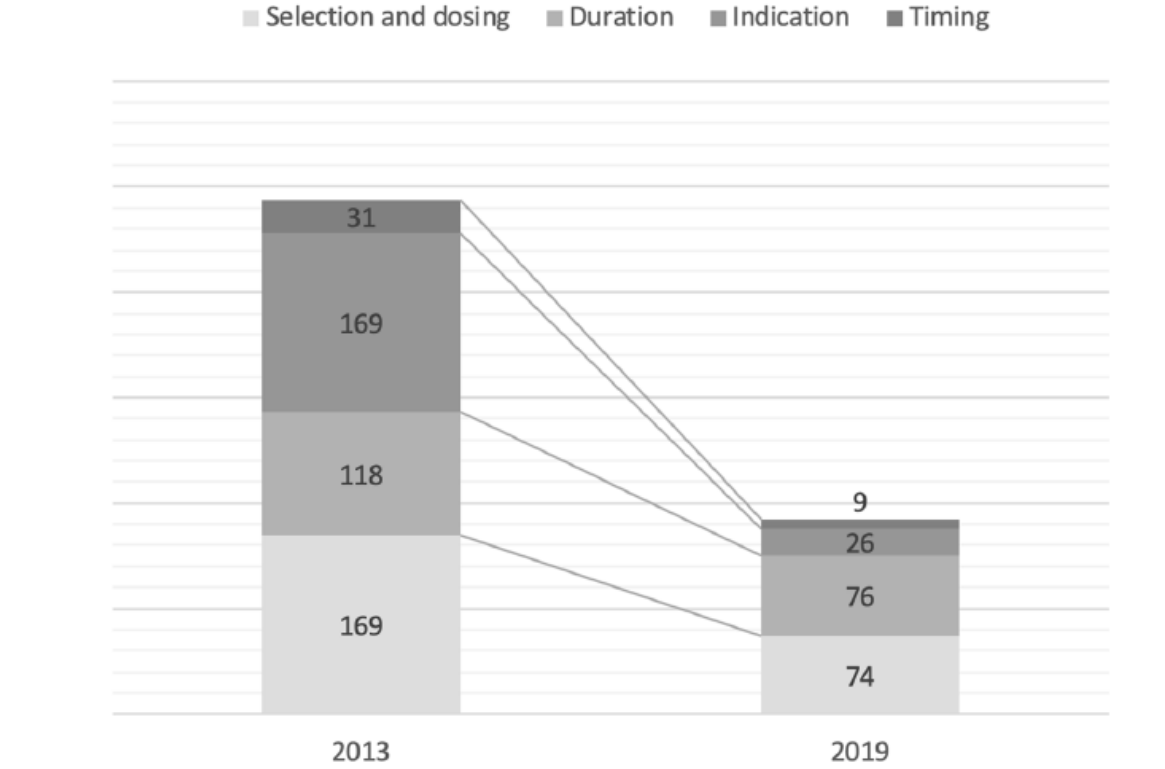


Fig. 1 Total number of inappropriate cases per dimension at baseline and post-interventional survey

- ✓ En general, la adherencia a la guía mejoró del 36,6 % al inicio al 57,9 % después de la intervención (p< 0,0001).
- ✓ También se detectó una mejora significativa (p < 0,001) para cada categoría: *indicación* (58,5 a 93,2%), *selección y dosificación* (58,5 a 80,6%), *tiempo* (92,4 a 97,6%), *duración* (71 a 80,1 %).

CONTROL GLICEMICO

- ✓ Implemente el control glucémico perioperatorio y use niveles objetivo de glucosa en sangre inferiores a 200 mg/dL en pacientes con y sin diabetes.

Berríos-Torres SI, Umscheid CA, Bratzler DW, et al. Centers for Disease Control and Prevention Guideline for the Prevention of Surgical S ite Infection, 2017. JAMA Surg 2017; 152:784.

World J Surg (2022) 46:391–399
https://doi.org/10.1007/s00268-021-06368-x

World Journal of Surgery

ORIGINAL SCIENTIFIC REPORT

The Role of HbA1c as a Positive Perioperative Predictor of Surgical Site and Other Postoperative Infections: An Explorative Analysis in Patients Undergoing Minor to Major Surgery

Andrea Kopp Lugli[1] · Walter R. Marti[2] · Lilian Salm[2] · Edin Mujagic[5] · Marcel Bundi[2] ·

Abstract

Background Patients with diabetes mellitus type 2 (DM2) inhere impaired peripheral insulin action leading to higher perioperative morbidity and mortality rates, with hospital-acquired infections being one important complication. This post hoc, observational study aimed to analyze the impact of surgical and metabolic stress as defined by the surrogate marker hemoglobin A1c (HbA1c), in relation to self-reported DM2, on perioperative infection rates in a subcohort of the Surgical Site Infection (SSI) Trial population.

Methods All patients of the SSI study were screened for HbA1c levels measured perioperatively for elective or emergency surgery and classified according to the American Diabetes Association HbA1c cutoff values. SSI and nosocomial infections, self-reported state of DM2 and type of surgery (minor, major) were assessed.

Results HbA1c levels were measured in 139 of 5175 patients (2.7%) of the complete SSI study group. Seventy patients (50.4%) self-reported DM2, while 69 (49.6%) self-reported to be non-diabetic. HbA1c levels indicating pre-diabetes were found in 48 patients (34.5%) and diabetic state in 64 patients (46%). Forty-five patients of the group self-reporting no diabetes (65.2%) were previously unaware of their metabolic derangement (35 pre-diabetic and 10 diabetic). Eighteen infections were detected. Most infections (17 of 18 events) were found in patients with HbA1c levels indicating pre-/diabetic state. The odds for an infection was 3.9-fold (95% CI 1.4 to 11.3) higher for patients undergoing major compared to minor interventions. The highest percentage of infections (38.5%) was found in the group of patients with an undiagnosed pre-/diabetic state undergoing major surgery.

Conclusions These results encourage investment in further studies evaluating a more generous and specific use of HbA1c screening in patients without self-reported diabetes undergoing major surgery.

Trial registration Clinicaltrials.gov identifier: NCT 01790529

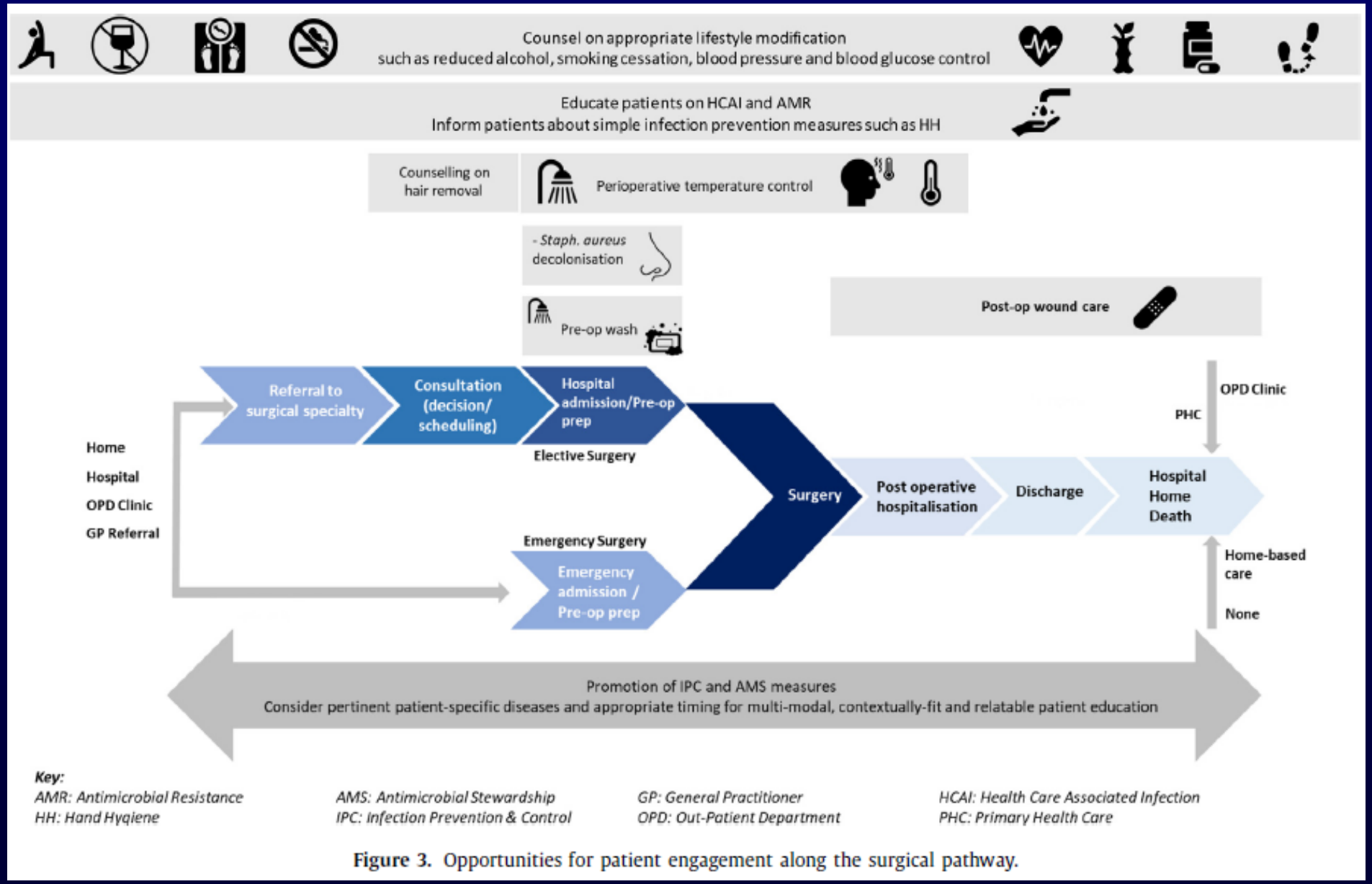


Figure 3. Opportunities for patient engagement along the surgical pathway.

Mbamalu O, Bonaconsa C, Nampoothiri V, Surendran S, Veepanattu P, Singh S, Dhar P, Carter V, Boutall A, Pennel T, Hampton M, Holmes A, Mendelson M, Charani E. Patient understanding of and participation in infection-related care across surgical pathways: a scoping review. Int J Infect Dis. 2021 Sep;110:123-134. doi: 10.1016/j.ijid.2021.07.039.

Table 1

A selection of evidence-based measures for the prevention of postoperative wound infection

Measure (reference)	Number of RCTs	SSI rate without measure (no. of pt.)	SSI rate with measure (no. of pt.)	RR [95% CI]	p value	Approximate change of SSI rate
Shaving (10)	n = 7	2.1 % (19/887)	4.2 % (34/819)	1.82 [1.02; 3.14]	0.03	+80 %
Nasal decolonization and washing with chlorhexidine*1 (11)	n = 5	2 % (253/12 790)	0.8 % (152/19 940)	0.41 [0.30; 0.50]	< 0.001	–60 %
Normothermia (12)	n = 3	13 % (37/290)	4.7 % (14/299)	0.36 [0.20; 0.66]	0.008	–65 %
Normoglycemia (13)	n = 15	16 % (392/2 488)	9.4 % (231/2 464)	0.59 [0.50; 0.68]	< 0.001	–40 %
Skin disinfection with alcohol and chlorhexidine (14)	n = 20	4.8 % (725/15 263)	2 % (425/13 743)	0.65 [0.55; 0.77]	< 0.001	–35 %
Use of negative-pressure systems*2 (15)	n = 28	14 % (315/2 205)	8.8 % (194/2 193)	0.61 [0.49; 0.76]	< 0.001	–40 %
Use of triclosan-coated suture material (16)	n = 25	9.7 % (581/5 949)	6.9 % (420/6 008)	0.73 [0.65; 0.82]	0.005	–30 %

*1 Effect statistically significant only for high-risk procedures (cardiac surgery, orthopedic surgery).
*2 Effect statistically insignificant for visceral surgical, gynecological, and urological procedures.
CI, confidence interval; pt., patients; RCT, randomized and controlled trial; RR, risk reduction; SSI, surgical site infection

Eckmann C, Aghdassi SJS, Brinkmann A, Pletz M, Rademacher J. Perioperative Antibiotic Prophylaxis—Indications and Modalities for the Prevention of Postoperative Wound Infection. Dtsch Arztebl Int. 2024 Apr 5;121(7):233-242. doi: 10.3238/arztebl.m2024.0037

ANESTHESIA & ANALGESIA

IARS International Anesthesia Research Society

The "5-Ps" Mnemonic for Antibiotic Prophylaxis Before Surgery

Hasanin, Ahmed MD, DESA; Mostafa, Maha MD

Anesthesia & Analgesia 141(2):p e29-e31, August 2025. | *DOI:* 10.1213/ANE.0000000000007596

Las "5-Ps":

- ✓ Penetración en luz gastrointestinal, respiratoria o genital → cirugías limpias-contaminadas.
- ✓ Prótesis → presencia de implantes (mallas, ortopédicos, mamarios, peneanos, etc.).
- ✓ Presencia de infección → cirugías contaminadas (eliminación de focos sépticos, tejidos infectados).
- ✓ Procedimiento prolongado → tiempo quirúrgico extenso aumenta riesgo de infección.
- ✓ Paciente con inmunidad deficiente → riesgo adicional de infección incluso en cirugías limpias

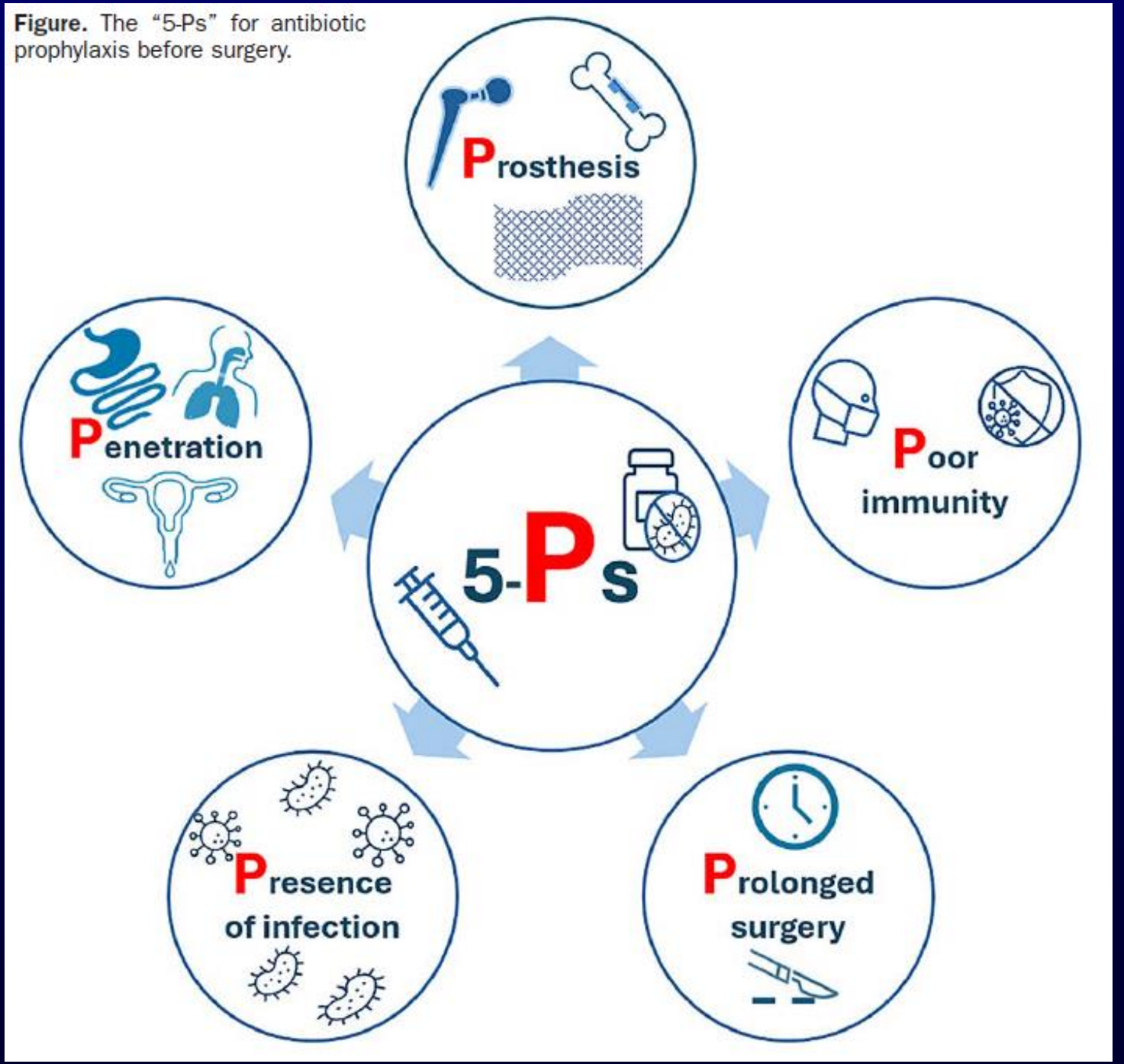


Figure. The "5-Ps" for antibiotic prophylaxis before surgery.

REVIEW

Preventing perioperative infections: a call to action for anesthesiologists

Curr Opin Anesthesiol 2024, 37:712–718 December 2024
DOI:10.1097/ACO.0000000000001432

Madina Gerasimov[a], Della M. Lin[b], Uma Munnur[c] and Melanie Donnelly[d]

FIGURE 1. Anesthesiologists' role in controlling surgical-site infection rates.

Table 1. Examples of components of intervention bundles to reduce pathogen transmission events in the perioperative period

SURVEILLANCE	INTERVENTION BUNDLE			FEEDBACK
	Examples of Opportunity	Examples of Types of intervention	Risk effectiveness	
	Medication preparation and vascular access	• Use IPA caps to disinfect hubs • Use DNC C • Limit/avoid use of OLS	Avoid having to "remember" to wipe at the time of injection with caps. Removing OLS altogether would be a forcing function	
	Separate Clean/Dirty during Induction	• Double-Glove and Sheath • Basket for contaminated airway equipment on IV pole	Provides convenient segregation at the point of care	
	Maintain clean AWE	• Use microfiber wipes after induction on AWE • Use microfiber wipes/alcohol wipes on monitors, keyboards, mobile phone before case start	Placing tools near workflow	
	Handwashing Hygiene	• Provide hand sanitizer dispensers at AWE and wearable sanitizer dispensers	Placing tools near workflow	
	Appropriate Antibiotic prophylaxis	• Comprehensive Allergy History • EHR default stop for antibiotic prophylaxis at surgery stop time	Computer automation	
	Control Blood sugar during perioperative period	• Maintain blood glucose at 110-150mg/dl • Develop department-wide protocols	Standardized protocols for infusion and laboratory testing	
	Maintain normothermia	• Maintain temp > 35.5^{o}C Provide warming devices • Consider preoperative warming	Standardized department-wide protocols	

Foundational Collaborative Learning Platform

CONCLUSIONES

1. Las ISO son infecciones persistentes y prevenibles asociadas a la atención de la salud.
2. Las ISO siguen siendo la principal complicación de un paciente quirúrgico.
3. En cirugía, la correcta administración de la profilaxis antibiótica es crucial para prevenir la incidencia de ISO, pero requiere un esfuerzo constante y estrecha colaboración entre los prescriptores y el equipo de administración de ATB.


Dziękuję
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Kiitos
Mulţumesc
Misaotra
Mercé
Tak
Thank You
Grazie
Thank You
Merci
Gracias
Arigatô
Teşekkür Ederim
Sagolun
Mahalo
Xièxie
Matondo
Obrigado
Chokrane
Grazie
Chokrane
Efharisto
Спасибо
Takk
хвала
Dank Je
Toda
Tak
Danke
Takk
Hvala
Faleminderit
Terima Kasih