

Factori de risc infectie de plaga asociati unei antibioprofilaxii preoperatorii eficiente

LILIANA CONSTANTIN

Spitalul Clinic de Urgenta Bucuresti (SCUB)

PANDEMIA SARS
- COV 2

2 330 000
decese / an

INFECTII

16 000 000
decese / an

INFECTIILE
=PANDEMIE
OCULTA

ANTBIOPROFILAXIA PREOPERATORIE - probleme

▶ **MOMENTUL** ADMINISTRARII

- ▶ intre 60 si 120 minute inainte de momentul inciziei si administrare doza suplimentara la 4 ore – se asociaza si cu pierderea sangvina
- ▶ Se prelungeste in postoperator
- ▶ Se transforma in antibioterapie
- ▶ **IMPORTANT unde se administreaza – sectie / BO**



- Procedura Operationala privind “INGRIJIRI PERIOPERATORII ACORDATE PACIENTULUI”
- Procedura Operationala privind “SIGURANTA PACIENTULUI IN BLOCUL OPERATOR”

MEDICATIE PREOPERATORIE	
<input type="checkbox"/> ANTIBIOPROFILAXIE cu	<input type="checkbox"/> <i>test alergie antibiotic efectuat</i>
<input type="checkbox"/> ora administrarii antibiotic.....executat de.....	
<i>(antibioticul trebuie administrat cu max. 30 minute inaintea inciziei)</i>	
<input type="checkbox"/> ora administrarii ACID TRANEXAMIC	<input type="checkbox"/> doza 1 <input type="checkbox"/> doza 2
<i>(doza = 1g; se administreaza PRIMA DOZA INAINTEA INCEPERII interventiei chirurgicale _ maxim 30 min inaintea inciziei - si A DOUA- INAINTE DE INCHIDEREA PLAGII)</i>	
<input type="checkbox"/> <i>terapia durerii cu combinatie de antiinflamator, antialgic (Perfolgan, Tramadol) si numai la nevoie opioid.</i>	

PO privind Ingrijirile perioperatorii - formulare

- **FISA PREOPERATORIE** – completata de Asistentul medical din **sectie**, dupa ce a efectuat ingrijirile preoperatorii
- **FISA DE BLOC OPERATOR** – completata de Asistentul medical din **Blocul Operator** din momentul in care primeste pacientul până îl preda catre salonul cu paturi
- **LISTA DE VERIFICARE A PROCEDURILOR CHIRURGICALE** – este completata de asistentul medical din **Blocul Operator**

FISA PREOPERATORIE (sectie cu paturi)

DATA.....SECTIA.....SALONFO.....

1. PACIENT
<ul style="list-style-type: none"> • NUME..... PRENUME..... • VARSTAani ; SEX <input type="checkbox"/> M / <input type="checkbox"/> F ; DATA INTERNARE..... • Inaltimea cm; Greutatea kg ; Religie.....
2. MEDIC CURANT Dr.
3. ASISTENT MEDICAL responsabil pregatire preoperatorie (nume in clar) semnatura.....
4. DIAGNOSTIC CHIRURGICAL
•
5. INTERVENTIA CHIRURGICALA PROPUASA
•
• Tip interventie <input type="checkbox"/> electiva <input type="checkbox"/> de urgenta <input type="checkbox"/> urgenta amanata
6. PREGATIRE TEGUMENTE
• Dus corporal efectuat preoperator <input type="checkbox"/> general / <input type="checkbox"/> pe regiuni <input type="checkbox"/> NU



TIP ANESTEZIE
<input type="checkbox"/> generala <input type="checkbox"/> bloc axial –epi/spinala <input type="checkbox"/> bloc plex / nerv
MONITORIZARE TIMP
Ora primire in sala.....Ora anesteziei.....Ora inciziei.....
Ora sutura completa.....Ora trezire anestezie.....Ora iredire din sala.....

PREGATIRE PREOPERATORIE

PREGATIRE TEGUMENTE
<input type="checkbox"/> Dus corporal efectuat preoperator <input type="checkbox"/> DA <input type="checkbox"/> NU
Metoda de indepartare a parului <input type="checkbox"/> tuns <input type="checkbox"/> epilant ; Executat in SALON/SALA OPERATI/ salon preoperator de.....
Identificarea zonei de incizie prin marcarea vizibila folosind skin marker <input type="checkbox"/> sold <input type="checkbox"/> drept <input type="checkbox"/> stang
Ciorap antiembolie membrul inferior <input type="checkbox"/> stg <input type="checkbox"/> drept <input type="checkbox"/> NU
DOCUMENTE SI INVESTIGATII
<input type="checkbox"/> foaia de observatii <input type="checkbox"/> radiografii <input type="checkbox"/> RMN <input type="checkbox"/> CT <input type="checkbox"/> planning preop <input type="checkbox"/> consimtamant semnat <input type="checkbox"/> grup sangvin <input type="checkbox"/> analize sange <input type="checkbox"/> urocultura <input type="checkbox"/> exudat naso-faringian
Status infectios actual : <input type="checkbox"/> HCV <input type="checkbox"/> HBV <input type="checkbox"/> HIV altele.....
Alergie <input type="checkbox"/> DA <input type="checkbox"/> NU ; factori alergeni cunoscuti.....
Diabet <input type="checkbox"/> DA <input type="checkbox"/> NU ; <input type="checkbox"/> tip I <input type="checkbox"/> tip II
MEDICATIE PREOPERATORIE
<input type="checkbox"/> ANTI-BIOPROFILAXIE cu <input type="checkbox"/> test alergie antibiotic efectuat
<input type="checkbox"/> ora administrarii antibiotic.....executat de..... <i>(antibioticul trebuie administrat cu max. 30 minute inaintea inciziei)</i>
<input type="checkbox"/> ora administrarii ACID TRANEXAMIC <input type="checkbox"/> doza 1 <input type="checkbox"/> doza 2
<i>(doza = 1g; se administreaza PRIMA DOZA INAINTEA INCEPERII interventiei chirurgicale _ maxim 30 min inaintea inciziei - si A DOUA- INAINTE DE INCHIDEREA PLAGII)</i>
<input type="checkbox"/> terapia durerii cu combinatie de antiinflamator, antialgic (Perfalgan, Tramadol) si numai la nevoie opioid.

LISTA DE VERIFICARE A PROCEDURILOR CHIRURGICALE (check list OMS)

NUME PRENUME PACIENT.....SECTIA.....FO.....SALA OP.....DATA.....

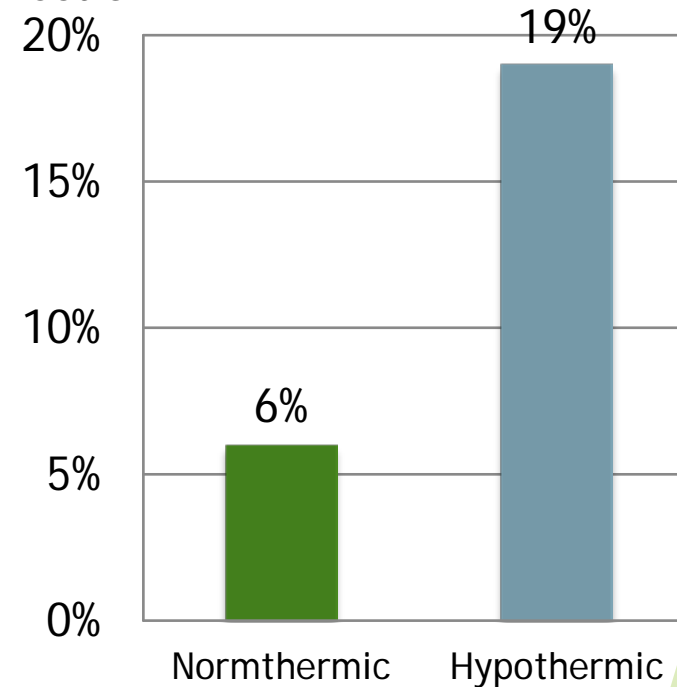
INAINTEA INDUCTIEI ANESTEZIEI	INAINTEA INCIZIEI PIELII	INAINTE CA PACIENTUL SA PARASEASCA SALA DE OPERATII
<p><input type="checkbox"/> Pacientul a confirmat</p> <ul style="list-style-type: none"> ● Identitatea ● Zona anatomica ● Procedura chirurgicala ● Consimtament informat <p><input type="checkbox"/> Zona anatomica / neaplicabil</p> <p><input type="checkbox"/> Verificarea sigurantei anesteziei realizata</p> <p><input type="checkbox"/> Pulsoximetru conectat si functional</p> <p>Are pacientul: O alergie cunoscuta?</p> <p><input type="checkbox"/>Nu <input type="checkbox"/>Da</p> <p>Dificultate respiratorie / Risc de aspiratie</p> <p><input type="checkbox"/>Nu <input type="checkbox"/>Da, Echipamentul /Asistenta disponibile</p> <p>Risc de hemoragie > 500ml (7 ml/kg la copii)</p> <p><input type="checkbox"/>Nu <input type="checkbox"/>Da, Acces intravenos adecvat si fluide disponibile</p>	<p><input type="checkbox"/> Confirmati faptul ca membrii echipei medicale si-au precizat numele si rolul</p> <p><input type="checkbox"/> Chirurgul, Personalul de Anestezie si Asistenta confirma verbal:</p> <ul style="list-style-type: none"> ● Numele pacientului ● Zona anatomica ● Procedura chirurgicala <p>EVENIMENTE CRITICE ANTICIPATE</p> <p><input type="checkbox"/> Catre chirurg: Care sunt etapele critice sau neasteptate, durata interventiei, sangerarile anticipate?</p> <p><input type="checkbox"/> Catre echipa de anestezie: Exista motive de ingrijorare referitoare la pacient?</p> <p><input type="checkbox"/> Catre echipa de asistente: A fost realizata sterilizarea? Au echipamentele medicale probleme?</p> <p>A fost realizata antibioprofilaxia in ultimele 60 de minute?</p> <p><input type="checkbox"/>Da <input type="checkbox"/>Neaplicabil</p> <p>Este afisata imagistica medicala?</p> <p><input type="checkbox"/>Da <input type="checkbox"/>Neaplicabil</p>	<p>Asistenta medical confirma verbal echipei medicale:</p> <p><input type="checkbox"/> Numele procedurii inregistrate</p> <p><input type="checkbox"/> Numarul instrumentelor, compreselor, acelor este corect</p> <p><input type="checkbox"/> Etichetarea piesei (se citeste cu voce tare eticheta, inclusiv numele pacientului)</p> <p><input type="checkbox"/> Exista probleme tehnice la echipamentele care trebuie solutionate?</p> <p><input type="checkbox"/> Chirurgul, echipa de anestezie si asistenta reconfirma principalele motive de ingrijorare referitoare la tratamentul si recuperarea pacientului</p>



Perioperative Hypothermia

- ▶ REACTII ADVERSE - Surgical Site Infection
 - ▶ Vasoconstrictie
 - ▶ Scaderea oxigenarii celulare
 - ▶ Reducerea activitatii neutrofilelor
 - ▶ Scaderea functiilor de aparare
- ▶ Graficul arata diferenta ratei de SSI intre pacientii normotermici si cei hipotermici

Percent of Patients with Surgical site Infection



Kurz A, Sessler DI, Lenhardt R. Perioperative normothermia to reduce the incidence of surgical-wound infection and shorten hospitalization. Study of Wound Infection and Temperature Group. *N Engl J Med.* 1996;334:1209-1215.

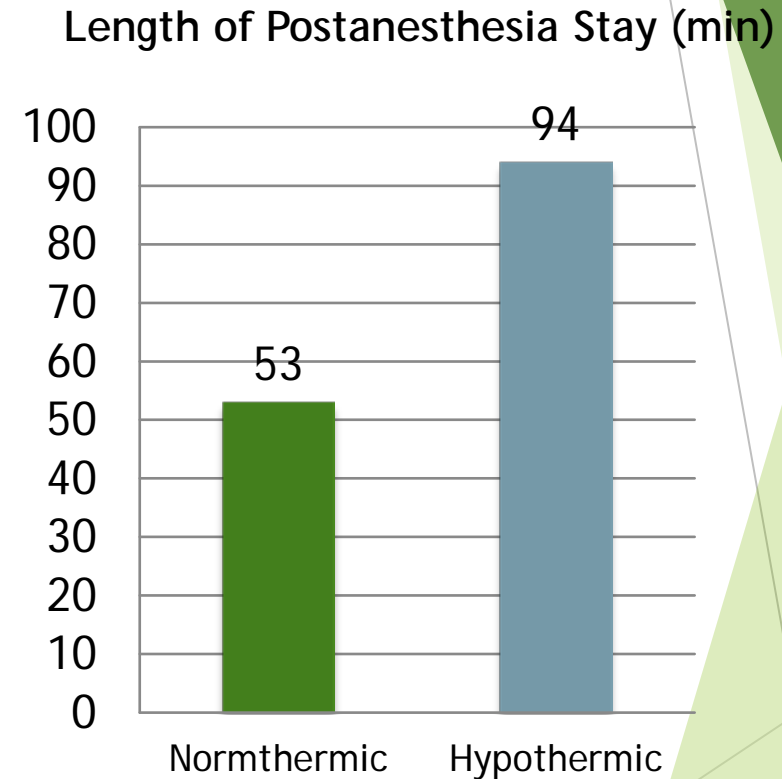
1. Normotermia pacientului

- **Mentinere temperatura corpului normala**
- Incalzirea pacientului incepe in sectie cu minim 30 min inainte de transfer in OR
- Se mentine in OR si continua in ATI



Perioperative Hypothermia

- ▶ Reactii adverse- Metabolismul medicamentelor
 - ▶ Hypothermia reduce metabolismul anestezicelor
- ▶ Reactii adverse - Postanesthesia Recovery
 - ▶ durata trezirii din anestezie prelungita



Lenhardt R, Marker E, Goll V, et al. Mild intraoperative hypothermia prolongs postanesthetic recovery. *Anesthesiology*. 1997;87:1318-1323.

1. Normotermia pacientului

- Mentinere temperatura fluide administrate - atat in sala de operatie cat si in ATI
- Incalzirea substantelor perfuzabile



1. Normotermia– lavajul plagii

- Solutia salina - **temperatura corpului**
- **NU** se face lavaj cu **ANTIBIOTIC** ca masura de prevenire a SSI
- lavajul cu **SOLUTIE PVI** dilutie 1%
- **LAVAJ PULSATIL** cu ser fiziologic inainte de implantare dar si a plagilor inainte de a incepe sutura



2. Optimizarea factorilor de risc legati de pacient

- Screening MRSA (SCUB - doar la elective)- decolonizare



- Protocol
- Mupirocin 2% cu/fara baie cu sapun CHG (5 zile - 3 ori /zi)
- NU antibioterapie

- Endogen - poate dezvolta Ssi prin raspandirea in zona plagii
- 2- 9 ori mai mari sanse sa dezvolte SSI
- 80% pacientii colonizati fac SSI

2. Igiena pacientului in SCUB

- Verificare la intrarea in BO



PROCEDURA PERIOPERATORIE

PREGATIRE TEGUMENTE

Dus corporal efectuat preoperator DA NU

Metoda de indepartare a parului tuns epilat ; Executat in SALON/SALA OPERATII/ salon preoperator de.....

Identificarea zonei de incizie prin marcarea vizibila folosind skin marker

sold drept stang

Ciorap antiembolie membrul inferior stg drept NU

3. SUPORT NUTRITIONAL perioperator



Consider administering oral or enteral multiple nutrient-enhanced formulas in underweight patients (undergoing major surgical operations)

Surgical team

Pharmacy/procurement and clinical staff

- *A nu se mai suprima alimentatia si hidratarea zile intregi preoperator*
- *Suport din partea familiei pacientului -*
- *STUDII : formule nutritionale - combinatii arginine, glutamine, acizi grasi Omega 3 si nucleotide, administrate oral sau enteral*

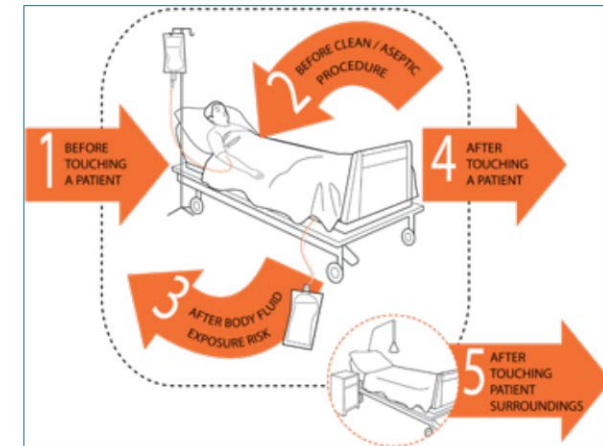
- *SCOP: PREV SSI si vindecarea plagii*
- *HIDRATAREA - functia renala*

4. igiena mainilor (hand hygiene HH) in SCUB

- ▶ Instruiri , cursuri
- ▶ Monitorizare
- ▶ Audit
- ▶ Reinstruire



The "My 5 Moments for Hand Hygiene" approach



Saxi H et al. J Hosp Infect 2007; 67:9-21.

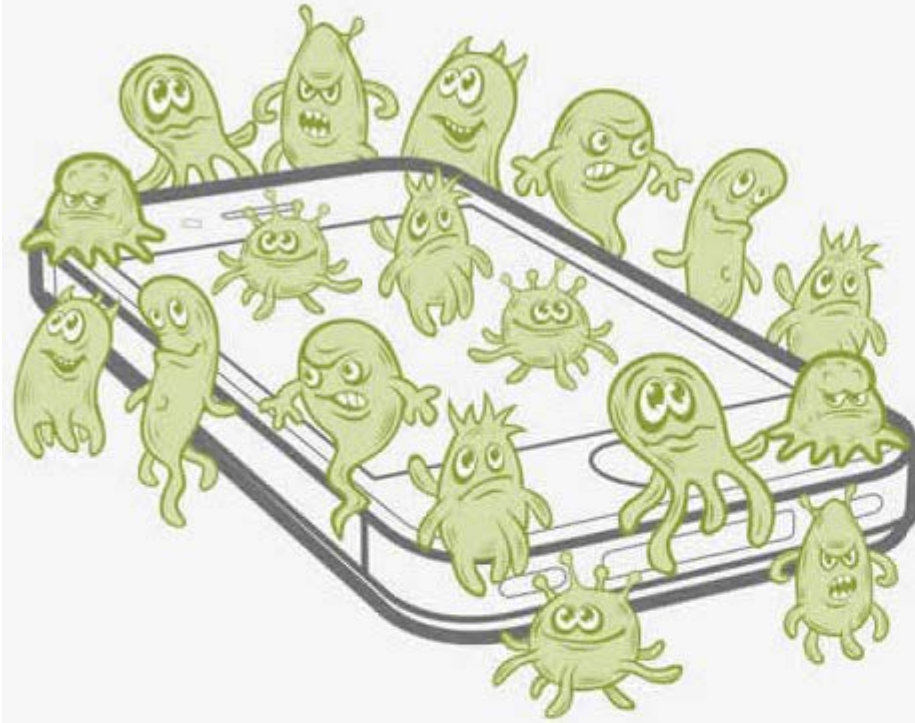
86

- ▶ COMPLIANTA LA IGIENA MAINILOR A SCAZUT DRAMATIC POST-PANDEMIE

40%



Telefonul mobil



VS



**A CELL PHONE HAS
18 TIMES
MORE BACTERIA**

**THAN A
PUBLIC
RESTROOM**

5. Sterilizarea instrumentarului chirurgical

- Kit-uri individuale codificate
- Monitorizare in Fisa de BO



8. INSTRUMENTAR NECESAR PREGATIT (lista componente atasate)
<input type="checkbox"/> set baza instrumentar chirurgical general (denumirea trusei.....data expirare.....)
<input type="checkbox"/> instrumentar chirurgical specific tipului de interventie (denumirea truselor..... expirare.....)
<input type="checkbox"/> instrumentar chirurgical sterilizat individual in pungi (se mentioneaza in lista atasata)

6. Optimizarea factorilor de risc legati de pacient

- Statusul infectios al pacientului in momentul transferului in BO



9. DOCUMENTE SI INVESTIGATII (se bifeaza ca exista in momentul transferului pacientului la Blocul Operator)
<ul style="list-style-type: none"><input type="checkbox"/> foaia de observatii <input type="checkbox"/> radiografii <input type="checkbox"/> RMN <input type="checkbox"/> CT <input type="checkbox"/> planning preop <input type="checkbox"/> consimtamant semnat <input type="checkbox"/> grup sangvin <input type="checkbox"/> analize sange (fisa imprimata)<input type="checkbox"/> infectii antecedente <input type="checkbox"/> NU <input type="checkbox"/> MRSA <input type="checkbox"/> DA <input type="checkbox"/> cu ce germen..... Date despre infectie in antecedente – localizare.....anul.....luna.....Status infectios actual : <input type="checkbox"/> NU <input type="checkbox"/>HCV <input type="checkbox"/>HBV <input type="checkbox"/>HIV <input type="checkbox"/> MRSA <input type="checkbox"/> alt germen.....Alergie <input type="checkbox"/> NU <input type="checkbox"/> DA; <input type="checkbox"/> factori alergeni necunoscuti.....<input type="checkbox"/> factori alergeni cunoscuti

- Status tegumentar corporal si in zona de incizie



- Acolo unde este cazul, zona de incizie este marcata vizibil cu skin marker ; se specifica zona marcata.....
- OBSERVATII IN LEGATURA CU STATUSUL TEGUMENTAR *EXISTENT LA ADMISIA* PACIENTULUI IN SALA DE OPERATII : tegumente intacte DA NU;
Ex: escare de decubit existente in zona.....
- OBSERVATII : (indicatii specifice altei specialitati chirurgicale)



Managementul plagii

- ▶ NU TERAPIA PRIN VACUUM CA METODA PROFILACTICA

Recomandari etapa post-operatorie controlul plagii, drenajului, cateterelor

18. EVALUARE si RECOMANDARI INGRIJIRE PLAGA CHIRURGICALA
<ul style="list-style-type: none">• drenaj plaga <input type="checkbox"/> NU <input type="checkbox"/> DA la nivelul• drenaj existent la alt nivel – toracic, etc; se recomanda supravegherea.....• OBSERVATII IN LEGATURA CU EVENTUALE RECOMANDARI pentru pansament / suprimare dren, etc.....
19. PREGATIRE SPECIMENE RECOLTATE
NUME PRENUME..... responsabil pentru: <input type="checkbox"/> depozitare / ambalare corespunzatoare; <input type="checkbox"/> etichetare; <input type="checkbox"/> completare date formular; <input type="checkbox"/> transport la..... <input type="checkbox"/> predat catre : nume prenume.....
20. Chirurgul, echipa de anestezie și asistenta medicala reconfirmă principalele motive de îngrijorare referitoare la tratamentul și recuperarea pacientului (criteriu cuprins in Checklist verificare interv.chirg)
Se mentioneaza motivele



Curatenia si dezinfectia mediului

Proces de Curatare, Dezinfectie si Monitorizare-Audit

(AHA, ASHE, APIC, Society of Hospital Medicine, University of Michigan, 2015)

Curatenia si dezinfectia mediului salaii de operatie

CONTROL RAPID, VIZUAL
In sala de operatie eficient

- fluorescent marking gel
- Adenosine Triphosphate (ATP) Monitoring



Pathogens survive on surfaces

Organism	Survival period
<i>Clostridium difficile</i>	35- >200 days. ^{2,7,8}
Methicillin resistant <i>Staphylococcus aureus</i> (MRSA)	14- >300 days. ^{1,5,10}
Vancomycin-resistant enterococcus (VRE)	58- >200 days. ^{2,3,4}
<i>Escherichia coli</i>	>150- 480 days. ^{7,9}
<i>Acinetobacter</i>	150- >300 days. ^{7,11}
<i>Klebsiella</i>	>10- 900 days. ^{6,7}
<i>Salmonella typhimurium</i>	10 days- 4.2 years. ⁷
<i>Mycobacterium tuberculosis</i>	120 days. ⁷
<i>Candida albicans</i>	120 days. ⁷
Most viruses from the respiratory tract (eg: corona, coxsackie, influenza, SARS, rhino virus)	Few days. ⁷
Viruses from the gastrointestinal tract (eg: astrovirus, HAV, polio- or rota virus)	60- 90 days. ⁷
Blood-borne viruses (eg: HBV or HIV)	>7 days. ⁵

1. Beard-Pegler et al. 1988. *J Med Microbiol.* 26:251-5.

2. BIOQUELL trials, unpublished data.

3. Bonilla et al. 1996. *Infect Cont Hosp Epidemiol.* 17:770-2

4. Boyce. 2007. *J Hosp Infect.* 65:50-4.

5. Duckworth and Jordens. 1990. *J Med Microbiol.* 32:195-200.

6. French et al. 2004. *ICAAC.*

7. Kramer et al. 2006. *BMC Infect Dis.* 6:130.

8. Otter and French. 2009. *J Clin Microbiol.* 47:205-7.

9. Smith et al. 1996. *J Med.* 27: 293-302.

10. Wagenvoort et al. 2000. *J Hosp Infect.* 45:231-4.

11. Wagenvoort and Joosten. 2002. *J Hosp Infect.* 52:226-7.

Ghid OMS prevenire SSI - 2016

DO THE RIGHT THING AT THE RIGHT TIME TO STOP SURGICAL SITE INFECTION

Recommendations for safe surgical care



INFECTION PREVENTION AND CONTROL (IPC) TEAM



PHASE	ACTION	SUPPORTED BY
PREOPERATIVE	Do NOT use laminar airflow ventilation systems (not beneficial for patients undergoing total arthroplasty surgery)	SURGICAL TEAM, PREOPERATION/STAFF AND NON-TRAUMA STAFF
	Use 7% magnifying disinfectant to remove hand carriers of Staphylococcus aureus in cardiac and orthopedic surgery (evidence by other surgery)	WARD NURSE, SURGICAL TEAM, PHARMACY
	Do NOT remove patient hair, or if absolutely necessary, remove with a clipper, do not shave	SURGICAL TEAM, PATIENT INFORMATION AND EDUCATION
	Administer surgical antibiotic prophylaxis in the 120 minutes preceding surgical incision (in the type of operation and the half site of the antibiotic)	PREOPERATION/STAFF AND NON-TRAUMA STAFF, IPC TEAM/PHARMACY
	Prepare hands for surgery by scrubbing, using the correct technique with a suitable antimicrobial soap and water OR an alcohol-based handrub	SURGEON, PREOPERATION/STAFF AND NON-TRAUMA STAFF
	Carry out mechanical bowel preparation always combined with administering preoperative oral antibiotics to adult patients undergoing elective colorectal surgery	SURGICAL TEAM, PREOPERATION/STAFF AND NON-TRAUMA STAFF
	Consider administering oral or enteral multiple resistant enhanced formulae to underweight patients undergoing major surgical operations	SURGICAL TEAM, PREOPERATION/STAFF AND NON-TRAUMA STAFF
	Do NOT discontinue immunosuppressive medication	PREOPERATION/STAFF AND NON-TRAUMA STAFF, ANAESTHETIC STAFF
	Clean and sterilize/decontaminate surgical instruments and other equipment	SURGICAL TEAM, PREOPERATION/STAFF AND NON-TRAUMA STAFF
	Clean and prepare operating room environment	CLEANING STAFF, SURGICAL TEAM
INTRAOPERATIVE	Do NOT use plastic adhesive incise drapes (unless after hair with or close without antimicrobial impregnated)	SURGICAL TEAM, PREOPERATION/STAFF AND NON-TRAUMA STAFF
	Use alcohol-based solution containing chlorhexidine gluconate for skin preparation	SURGICAL TEAM, PREOPERATION/STAFF AND NON-TRAUMA STAFF
	Do NOT use antimicrobial sealants after surgical site skin preparation	SURGICAL TEAM, PREOPERATION/STAFF AND NON-TRAUMA STAFF
	Administer 80% fraction of inspired oxygen (FiO ₂) to adults undergoing general anaesthesia with mechanical ventilation	SURGICAL TEAM, PREOPERATION/STAFF AND NON-TRAUMA STAFF
	Consider using a warming device	SURGICAL TEAM, PREOPERATION/STAFF AND NON-TRAUMA STAFF
	Consider using a protocol for intensive blood glucose control (for non-diabetic and non-diabetic adult patients)	SURGICAL TEAM, CLINICAL STAFF
	Consider using goal-directed therapy	SURGICAL TEAM, PREOPERATION/STAFF AND NON-TRAUMA STAFF
	Consider irrigating incisional wound with an aqueous povidone iodine solution before closure (in clean and clean-contaminated wounds)	SURGICAL TEAM, PREOPERATION/STAFF AND NON-TRAUMA STAFF
	Do NOT perform antibiotic wound irrigation	SURGICAL TEAM, PREOPERATION/STAFF AND NON-TRAUMA STAFF
	Consider using wound protector devices (in clean-contaminated, contaminated and dirty abdominal procedures)	SURGICAL TEAM, PREOPERATION/STAFF AND NON-TRAUMA STAFF
POSTOPERATIVE	Do NOT prolong surgical antibiotic prophylaxis in the postoperative period	SURGICAL TEAM, PREOPERATION/STAFF AND NON-TRAUMA STAFF
	Do NOT continue surgical antibiotic prophylaxis due to the presence of a drain	SURGICAL TEAM, PREOPERATION/STAFF AND NON-TRAUMA STAFF
	Remove wound drain when clinically indicated	PREOPERATION/STAFF AND NON-TRAUMA STAFF, SURGICAL TEAM
	Administer 80% FiO ₂ for 2-4 hours post-op	WARD NURSE, PREOPERATION/STAFF AND NON-TRAUMA STAFF
	Evaluate and manage wound appropriately, including cleansing, dressing and care, according to the given wound situation	CLINICAL STAFF, SURGICAL TEAM, SURGICAL TEAM
	Do NOT use advanced dressings of any sort (see standard dressing manual)	WARD NURSE, PREOPERATION/STAFF AND NON-TRAUMA STAFF
	Consider using negative pressure wound therapy (evidence in closed surgical incisions in high-risk wounds)	SURGICAL TEAM, PREOPERATION/STAFF AND NON-TRAUMA STAFF
	Consider using triclosan-coated sutures	SURGICAL TEAM, PREOPERATION/STAFF AND NON-TRAUMA STAFF
	Maintain asepsis and discipline in the operating room	SURGICAL TEAM, CLINICAL STAFF
	Maintain asepsis and discipline in the operating room	SURGICAL TEAM, CLINICAL STAFF

GLOBAL GUIDELINES FOR THE PREVENTION OF SURGICAL SITE INFECTION

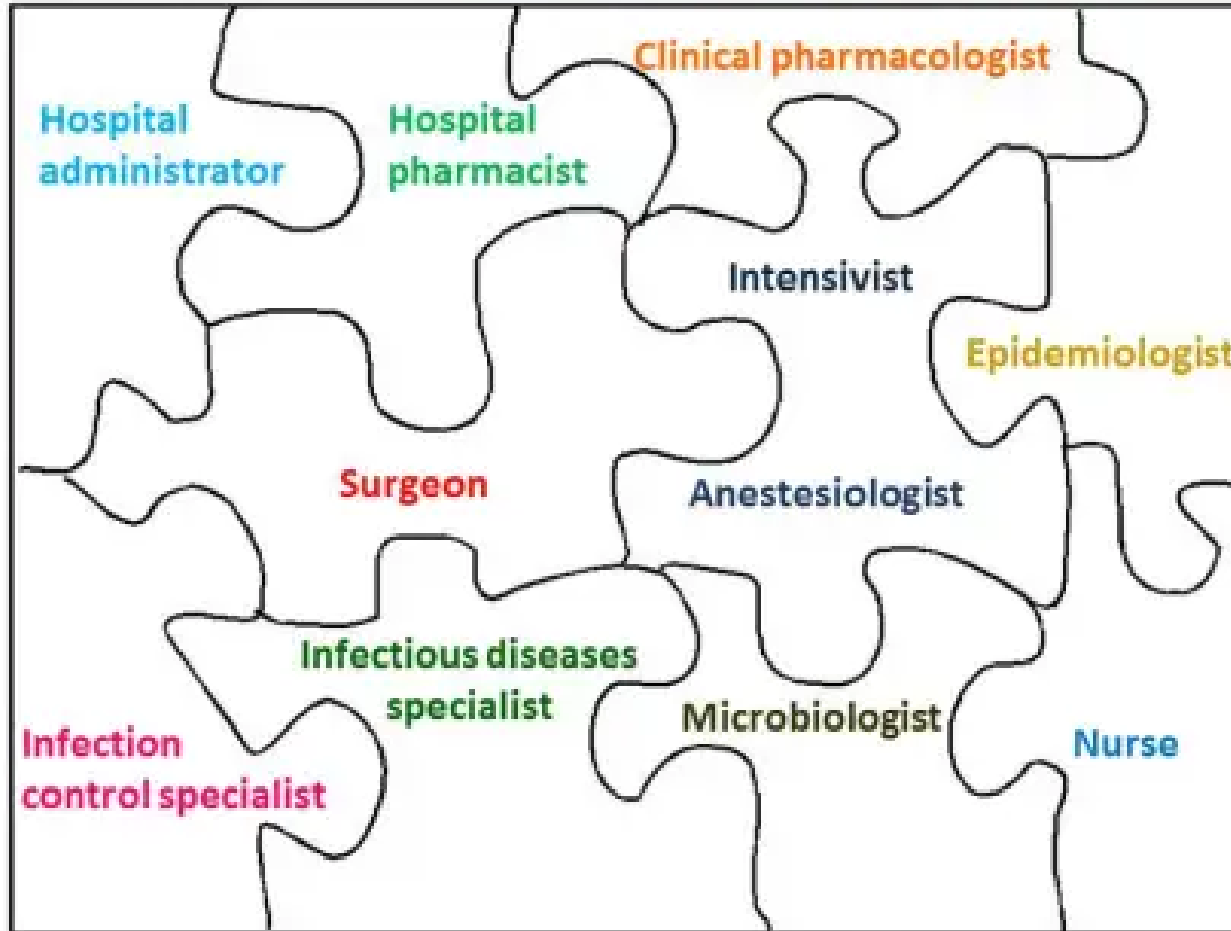


The WHO Global guidelines for the prevention of surgical site infection outline recommendations for safe surgical care that can significantly reduce the risk of surgical site infection. Wherever a routine surgical procedure is performed, actions should be taken by patients and health workers to translate these recommendations into practice. Applying all recommendations will improve the quality of care and patient safety and reduce antimicrobial resistance. In addition to surgical hand preparation, hand hygiene action (the 5 Moments for hand hygiene) apply to pre-, intra- and postoperative periods. Only the right human and financial resources, with senior administrator commitment, can ensure these actions happen every time at the right time. <http://www.who.int/infection-prevention/en/>

WHO Global Guidelines 2016

Liliana Constantin

The Interdisciplinary approach to infections in surgery



Concluzii

- ▶ Procedura operationala necesara - este standard de activitati - checklist
- ▶ DOCUMENTAREA tehnicilor - responsabilizeaza
- ▶ DOCUMENTAREA - ajuta anchetelor epidemiologice
- ▶ UN DOCUMENT CU OBIECTIVE COMUNE - creeaza si uneste echipa medicala
- ▶ AUDIT care imbunatateste si dezvolta

TODAY IS A
Great Day
TO BE
Amazing