

SURGICAL CARE IMPROVEMENT PROJECT (SCIP)

Prophylactic Antibiotics Administered Within 1 Hour Prior to Surgical Incision

Rationale: To establish bactericidal tissue and serum levels at the time of skin incision. Intraoperative re-dosing may be needed for long operations.

Interventions to Improve Prophylactic Antibiotic Administration

- ◆ Designate responsibility for antibiotic administration (anesthesia provider has proven to be most successful)
- ◆ Administer antibiotics in the Operating Room (OR)
- ◆ Use a visible reminder or checklist
- ◆ Systematically document antibiotic administration
- ◆ Hang antibiotic at head of patient's bed, ready for administration
- ◆ Educate OR staff on importance of antibiotic timing
- ◆ Provide feedback on performance
- ◆ Vancomycin is acceptable with physician documented justification for its use

Prophylactic Antibiotics Discontinued Within 24 Hours After Surgery End Time (48 hours for CABG and other cardiac surgery)

Rationale: Administration of antibiotics for more than a few hours after the incision is closed offers no additional benefit to the surgical patient. Prolonged administration does increase the risk of Clostridium difficile infection and the development of antimicrobial resistant pathogens.

- ◆ Specify the number and timing of any post-op antibiotic doses (e.g. Cefazolin every 8 hours x 2 doses post-op)

Hair Removal

- ◆ Remove all razors from the OR
- ◆ Perform hair removal with clippers, or depilatory

Maintenance of Normothermia (documentatin of active warming OR temperature equal to or greater than 96.8°F/36°C) ◆30 minutes prior to anesthesia to 15 minutes after anesthesia end time

- Use forced air warming devices, warm water garments, conductive over-the-body active warming (such as a resistive heating, over-the-patient blanket)

Warm I.V. and irrigation fluids, are additional strategies that assist in maintaining normothermia

Urinary Catheter Removal

Rationale: Risk of catheter-associated UTI increases with increasing duration of indwelling urinary catheterization.

PROPHYLACTIC ANTIBIOTIC REGIMEN SELECTION FOR SURGERY

Surgical Procedure	Recommended Antibiotics
CABG, Other Cardiac or Vascular	Cefazolin, cefuroxime, OR vancomycin** If β-lactam allergy: vancomycin* or clindamycin*
Hip/Knee Arthroplasty	Cefazolin OR cefuroxime OR vancomycin* If β-lactam allergy: vancomycin* or clindamycin*
Colon	Cefotetan, cefoxitin, ampicillin/sulbactam or ertapenem^ OR cefazolin or cefuroxime + metronidazole If β-lactam allergy: Clindamycin + aminoglycoside, or Clindamycin + quinolone, or Clindamycin + aztreonam OR Metronidazole with aminoglycoside, or Metronidazole + quinolone
Hysterectomy	Cefotetan, cefazolin, cefoxitin, cefuroxime OR ampicillin/sulbactam If β-lactam allergy: Clindamycin + Aminoglycoside, or Clindamycin + Quinolone, or Clindamycin + Aztreonam OR Metronidazole + Aminoglycoside, or Metronidazole + Quinolone
Special Considerations	* For cardiac, orthopedic, and vascular surgery, if the patient is allergic to β-lactam antibiotics, vancomycin or clindamycin are acceptable substitutes. ** Vancomycin is acceptable with a physician/APN/PA/pharmacist documented justification for its use (see data element <i>vancomycin</i>). ^ A single dose of ertapenem is recommended for colon procedures.