



UROLOGY ANTIMICROBIAL PROPHYLAXIS GUIDELINES

The goals of surgical prophylaxis are:

- 1) To prevent postoperative surgical site infections
- 2) To prevent postoperative morbidity and mortality
- 3) To produce no adverse effects
- 4) To have no adverse outcomes on the microbial flora of the patient or the hospital

A variety of sources have been reviewed. Our recommendations represent a summary of these sources, as well as previous practice at this institution for patients with sterile urine at the time of procedure:

Timing for parenteral antibiotics: The preop dose of antibiotic should be administered within 30 minutes prior to incision for cefazolin and 60 minutes for vancomycin. The dose should be completed prior to incision. If the elapsed time from the end of administration until the incision is >90 min for cefazolin, the drug should be redosed.

Organisms to be treated: E. coli is most common, however, other gram-negative bacilli and enterococci do occur.

OPEN UROLOGIC PROCEDURES

- **Procedures covered:** Nephrectomy, radical prostatectomy, open prostatectomy, testicular/scrotal surgery, incontinence procedures (e.g. slings, vaginal tapes) including those with prosthetic material.

Recommendation:

Cefazolin 2 gm IV x 1 dose preoperatively

Alternative if:

life-threatening allergy to cephalosporins or penicillin – Clindamycin 600 mg IV x 1 dose

- **Cystectomy and neobladder**

Recommendations:

Cefazolin 2 gm IV and metronidazole 500 mg IV x 1 dose preoperatively

Alternative if: life-threatening allergy to cephalosporins or penicillin – Clindamycin 600 mg IV x 1 dose and gentamicin 2 mg/kg x 1 dose

- **Penile implants and artificial sphincters:**

Recommendation:

Vancomycin 1 gm IV and gentamicin 2 mg/kg IV x 1 dose preoperatively

CLOSED UROLOGIC PROCEDURES:

- **Cystoscopy**

Indicated for high risk patients only:

- 1) women with post-coital or severe recurrent UTI
- 2) Men with enlarged prostate and history of recurrent UTI

Recommendation:

Two hours before procedure: Levofloxacin 500mg PO X 1 dose

or

Two hours before procedure: Trimethoprim/Sulfamethoxazole DS one tab po X 1 dose

- **Prostate biopsy**

Recommendation:

Two hours before biopsy: Levofloxacin 500 mg po x 1 dose

or

Pre-op: Gentamicin 2 mg/kg IV or IM x 1 dose

- **Transurethral resection of the prostate (TURP)**

Recommendation:

Cefazolin 2 gm IV x 1 dose preoperatively

Alternative if: life-threatening allergy to cephalosporins or penicillin – Clindamycin 600 mg IV x 1 dose and gentamicin 2 mg/kg x 1 dose

Intraoperative redosing NOT required for:

- Penile implants and artificial sphincters
- Cystoscopy
- Prostate biopsy

Intraoperative redosing for all other procedures:

Antibiotic	Intraop dose
Cefazolin	2 gm IV q4h
Clindamycin	600 mg IV q8h
Gentamicin	1mg/kg q8h
Metronidazole	500 mg IV q6h

- **Maximum duration of antibiotics (including pre- and intraop doses) is 24 hours.** Postop doses are not required without evidence of infection (i.e. purulence) noted in the OR.
- If major blood loss, patient will require redosing.

References

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TURP

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