

ID CORNER

Duration of Antibiotic Therapy

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With the emergence of multidrug resistant organisms, risks associated with antibiotic therapy and its complications, such as *Clostridioides difficile* infection or adverse reactions, there is increasing interest in shorter rather than longer durations of antibiotic therapy for common infections.

1. **Urinary Tract Infections:** A common misconception is that “pyelonephritis always needs 14 days of therapy”. If susceptibilities are known, ciprofloxacin for 7 days, or levofloxacin for 5 days is appropriate for pyelonephritis. Longer duration would be needed if a non-fluoroquinolone is used, or if bacteremia or urogenital abnormalities are present. [1]
2. **Respiratory Infections:** Community acquired pneumonia can be treated for 5 days if patient is afebrile for at least 48 hours with no more than one of the following signs of clinical instability: systolic blood pressure <90 mm Hg, respiratory rate >24 breaths/min, heart rate >100 beats/min, arterial oxygen saturation <90% or pO₂ <60 mm Hg on room air. [2] The recommended therapy duration for a hospital-acquired pneumonia and a ventilator-associated pneumonia is 7 days. [3]
3. **Skin and Soft Tissue Infections:** The recommended duration for cellulitis is 5 days, but treatment can be extended if the infection has not resolved within this

time period; the recommended duration for impetigo is 7 days. [4]

4. **Intraabdominal Infections:** 4 days of antibiotic therapy after adequate source control. [5]
5. **Coagulase-Negative *Staphylococcus* Catheter-Related Bacteremia:** Antibiotic therapy for 5-7 days is sufficient if the catheter is removed and the infection is uncomplicated (bacteremia and fever resolve within 72 hours, lack of intravascular hardware, and no evidence of endocarditis or suppurative thrombophlebitis). [6]

Notes

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