

Antibiotics - Antimicrobial Therapy

I. Background - Chapter 37

- A. Overview
 - 1. selective toxicity
- B. Empiric therapy
 - 1. culture
- C. Elimination
 - 1. bactericidal
 - 2. bacteriostatic
- D. Dosing
 - 1. concentration-dependent killing
 - 2. time-dependent killing
 - 3. postantibiotic effect
- E. Spectra
 - 1. narrow
 - 2. extended
 - 3. broad
- F. Resistance

II. Inhibitors of Cell Wall Synthesis - Chapter 38

- A. Overview
- B. Penicillins
 - 1. resistance
 - a. natural
 - b. acquired
 - 1) beta-lactamases
- C. Cephalosporins
 - 1. generations
 - a. 1st Generation
 - b. 2nd Generation
 - c. 3rd Generation
 - d. 4th Generation
- D. Vancomycin

III. Protein Synthesis Inhibitors - Chapter 39

- A. Overview
- B. Tetracyclines
 - 1. mode of action
 - 2. resistance
 - 3. Notes
 - 4. elimination
 - 5. adverse effects
- C. Aminoglycosides
 - 1. mode of action
 - 2. resistance
- D. Macrolides
 - 1. mode of action
 - 2. resistance
- E. Chloramphenicol
 - 1. mode of action
 - 2. resistance

IV. DNA Altering Drugs - Quinolones

Chapter 40

A. Overview

1. nalidixic acid

B. Mode of action

C. fluoroquinolones

D. Resistance

E. Elimination

V. Folate Antagonists

A. Background

1. Folic acid

B. Sulfonamides

1. background

2. mode of action

1) PABA

3. resistance

4. elimination

C. Trimethoprim

1. mode of action

2. resistance

D. Bactrim