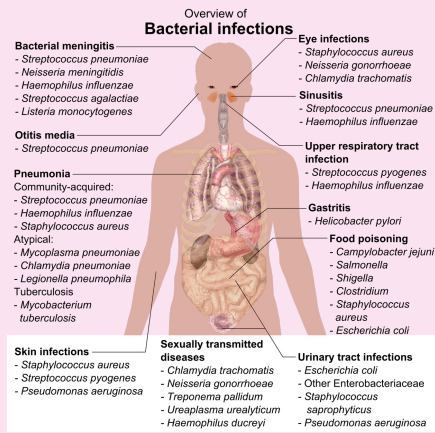


Bacterial Infections Based on Bugs



When Prophylaxis is Appropriate

Prosthetic heart valve/valvular disease + dental/oral procedures

- infective endocarditis

- GU/GI procedures

Rheumatic fever (recurrence)

People in contact with meningococcal disease

Surgical

People at high risk/in contact with TB

People at high risk/in contact with HIV

Medically Important Microorganisms

G+/G- cocci

G+/G- bacilli

Anaerobes

Spirochetes

Mycoplasma

Chlamydia

General AE of ABX

Vomiting

Severe watery diarrhea

Abdominal cramps

Allergic rxn

Antibiotic Spectra

Narrow Spectrum Active against single or limited group of microorganisms

Extended Spectrum Effective against G+ and some G-

Broad Spectrum Effective against both G+ and G-

Static Vs. Cidal

Bacteriostatics

inhibit growth without causing death

Sulfonamides (*DNA synthesis*), Chloramphenicol (*transcription and translation*)

Relies on INTACT immune system to clear nongrowing/viable bacteria

Bactericidal

Kill bacteria

PCN (cell wall inhibitor)

Can be given to patients with COMPROMISED immunity

Empiric Treatment - Match the Bug to Location

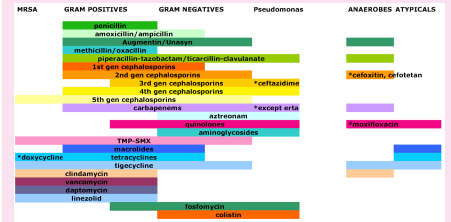
G+ cocci Skin

G- bacilli Urethras

G+, G-, anaerobes Large Intestine

Drug Distribution

Antibiotic Activity



Site of Action of ABX

Cell Wall Inhibitors

- Fosfomycin
- Cycloserine
- Vanco
- PCN
- CPN
- Monobactams
- Carbapenems
- Ethambutol
- Pyrazinamide
- Isoniazid

DNA Synthesis & Integrity Inhibitors

- Sulfonamides
- Trimethoprim
- Quinolones

Transcription & Translation Inhibitors

- Rifampin
- AGs
- Spectinomycin
- Tetracyclines
- Macrolides
- Chloramphenicol
- Streptogramins
- Oxazolidinones