

OUTLINE

Antimicrobials

Drug classes
Pharmacokinetic Properties
Concentration-dependent killing
Time-dependent killing
Post-antibiotic effect
Common interactions with other drugs

Antibacterial Allergies – Sulfa and Penicillin

Define true allergy
Sulfonamide antibiotics vs non-antibiotics
Penicillin – Cephalosporin cross-sensitivity

Bacteria

Differentiation
Normal flora
Common pathogens

Antibacterial Resistance–Contributing Factors

Trends
Mechanisms of resistance
Contributing factors

Methicillin-Resistant Staphylococcus Aureus - Community versus Hospital Acquired

Differentiating between CA- and HA-MRSA
Current clinical practice guidelines
Pharmacologic management

Enterobacteriaceae Resistance

Extended Spectrum Beta-Lactamase (ESBL)
What are ESBLs
Pharmacologic management
Carbapenem-Resistant Enterobacteriaceae (CRE)
What are CREs
Pharmacologic management

Urinary Tract Infections

Bacterial Etiology, Signs and Symptoms and Diagnosis
Cystitis and pyelonephritis
Complicated and uncomplicated
UTIs in pregnancy
Treatment (IDSA Guideline Treatment Algorithm)
Acute
Recurrent and relapse

Clostridium Difficile Infection

Risk factors
Pharmacology management
Fecal Transplantation
Probiotics literature review

Community–Acquired Pneumonia

Bacterial etiology
Diagnosis
Typical vs. atypical
Treatment (IDSA/ATS Guidelines) and monitoring
Outpatient vs. inpatient
Empiric treatment

Healthcare–Associated Pneumonia

Bacterial etiology
Treatment (IDSA/ATS Guidelines)

Upper Respiratory Tract Infections

Sinusitis and pharyngitis
Etiology (Viral vs. Bacterial)
Treatment

Skin and Soft Tissue Infections

Cellulitis
Bacterial etiology
Strep. vs. Staph. vs. MRSA
Signs & symptoms
Treatment (IDSA Guidelines)

Influenza

Clinical features
Diagnosis
Pharmacology management

Immunizations (Adult)

Types of Vaccines
General recommendations
Contraindications & precautions

Questions?

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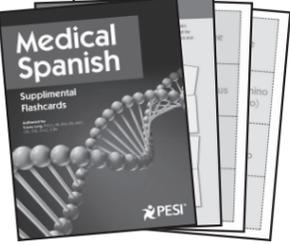
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PHARMACOLOGY

OF INFECTIOUS DISEASES & IMMUNIZATIONS

for Advanced Practice Clinicians

TOWSON, MD
Monday, July 6, 2020

ELLCOTT CITY, MD
Tuesday, July 7, 2020

FAIRFAX, VA
Wednesday, July 8, 2020



PHARMACOLOGY

OF INFECTIOUS DISEASES & IMMUNIZATIONS

for Advanced Practice Clinicians

Featuring **Eric Wombwell, PharmD, BCIDP**

- Antimicrobials
- Preventive strategies to limit antimicrobial resistance
- C. Difficile
- UTIs
- Respiratory Infections
- Skin Infections
- Treatment (IDSA) guidelines
- Immunizations (Adult)

Earn up to
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PHARMACOLOGY OF INFECTIOUS DISEASES & IMMUNIZATIONS

Attend this seminar and learn proper prescribing, patient education and monitoring procedures for a variety of drug regimens used to treat common acute and chronic infectious diseases. Choosing an antibacterial agent can be challenging, given the plethora of drugs available on the market and the emerging trend in bacterial resistance.

You will learn the pharmacology of different classes of antimicrobials used to treat infectious disease states encountered in clinical practice. Discover the spectrums of activity, pharmacokinetic characteristics and parameters for monitoring therapeutic outcomes. Emphasis is placed on the new antimicrobials and advances in evidence-based treatment guidelines. You will leave this seminar better prepared to design appropriate and cost-effective drug regimens for improved therapeutic outcomes.

Leave this seminar better prepared to design appropriate and cost-effective drug regimens for improved therapeutic outcomes.

SPEAKER

Eric Wombwell, PharmD, BCIDP, is a board certified infectious diseases pharmacist and Clinical Associate Professor for the Department of Pharmacy Practice and Administration at the University of Missouri - Kansas City, School of Pharmacy. Wombwell is responsible for developing clinical and educational initiatives designed to optimize student learning. He is active in lecturing, research and hospital pharmacy practice.

Dr. Wombwell completed his PharmD degree at the University of Missouri Kansas City, followed by an ASHP accredited pharmacy practice residency at the Kansas City VA Medical Center. Upon residency completion, Wombwell accepted a full-time non-tenured clinical faculty position at the University of Missouri - Kansas City, School of Pharmacy. His responsibilities include teaching Doctor of Pharmacy students in a variety of courses with special emphasis in the area of infectious diseases. As part of this position, Wombwell serves as a Clinical Pharmacy Specialist, working as part of the multidisciplinary team, providing care to acutely ill patients at Centerpoint Medical Center in Independence, Missouri. In addition, Wombwell functions in an adjunct faculty capacity with the University of Missouri - Kansas City, School of Dentistry, where he is responsible for teaching infectious diseases curricular content to dental students in the Pharmacology and Therapeutics course series.

Dr. Wombwell has more than 20 peer-reviewed publications on pharmacy and medication-related topics, and has delivered more than 50 invited presentations locally and nationally for continuing education to various health-professional audiences. He has been named Teacher-of-the-year in various capacities 10-times, including "Missouri Pharmacist Association - UMKC Faculty Member of the Year" in 2016, and received the "UMKC Provost's Award for Excellence in Teaching" in 2014.

Speaker Disclosures:

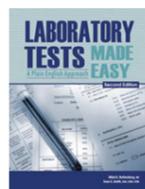
Financial: Eric Wombwell is a Clinical Assistant Professor, Department of Pharmacy Practice at the University of Missouri - Kansas City. He receives a speaking honorarium from PESI, Inc.

Non-financial: Eric Wombwell has no relevant non-financial relationships to disclose.

OBJECTIVES

1. Analyze the major classes of antibiotics and their pharmacokinetic characteristics.
2. Apply current evidenced-based approaches to select appropriate treatment regimens for common infections encountered in clinical practice.
3. Prescribe antimicrobials based on empiric dosing recommendations.
4. Plan goals of therapy and parameters for monitoring therapeutic response to antimicrobials.
5. Recommend specific antimicrobial therapeutic drug monitoring to maximize efficacy and minimize toxicities (e.g., vancomycin and aminoglycosides).
6. Develop preventative strategies to limit antimicrobial resistance.
7. Design patient and caregiver education on the proper use of antimicrobials.

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- 7:30** Registration/Morning Coffee & Tea
- 8:00** Program begins
- 11:50-1:00** Lunch (*on your own*)
- 4:00** Program ends

There will be two 15-min breaks (mid-morning & mid-afternoon). Actual lunch and break start times are at the discretion of the speaker. A more detailed schedule is available upon request.

Target Audience: Nurses • Advanced Practice Nurses • Clinical Nurse Specialists
Pharmacists • Nurse Practitioners • Physician Assistants

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