Priority Topic: INFECTIONS

Key Features:

I strongly suggest studying this topic with Priority Topic: Antibiotics as there is a lot of overlap between the two.

1. In patients with a suspected infection,
   
   a) Determine the correct tools (e.g., swabs, culture/transport medium), techniques, and protocols for cultures,
   
   b) Culture when appropriate (e.g., throat swabs/sore throat guidelines).

   ie: know WHEN and HOW to culture

What you should study:

Commonly cultured:

- STI (remember HPV testing)
- UTI/prostatitis
- vaginitis/balanitis
- open wound/ulcer
- GBS in pregnancy
- GAS pharyngitis
- O&P for diarrhea

✓ these are all covered under the relevant Priority Topics.
2. When considering treatment of an infection with an antibiotic, do so
   a) Judiciously (e.g., delayed treatment in otitis media with comorbid illness in acute bronchitis),
   b) Rationally (e.g., cost, guidelines, comorbidity, local resistance patterns).

What you should study:

✓ Infections in Primary Care Summary - this is an AMAZING table from the UK that covers almost ALL the infections listed below! but UK antibiotic guide
✓ Antibiotics and Common Infections RxFiles 2016 Canadian resource

Know antibiotic treatment guidelines for

All bacterial infections with their own Priority Topic:
- Urinary Tract Infection
- Pneumonia
- Sexually transmitted infections (including PID)
- Vaginitis
- Meningitis

As well as those covered by a Priority Topic:
- Acute Otitis Media (Earache)
- Otitis Externa (Earache)
- GAS Pharyngitis (URTI)
- Scarlet Fever (URTI / In Children)
- COPD Exacerbation (COPD)
- Acute Bacterial Rhinosinusitis (URTI)
- Pyelonephritis (Dysuria)
- Balanitis (Dysuria)
- Prostatitis (Dysuria, UTI, Prostate)
- Infectious diarrhea / food poisoning (Diarrhea)
- C. difficile colitis (Diarrhea)
- Traveller’s diarrhea (Travel Medicine, Diarrhea)
- Septic arthritis (Joint disorder)
- Cellulitis (Skin Disorders)
- Skin Ulcers (Skin Disorders)
- Osteomyelitis (not sure where it fits but definitely know it!)
- Sepsis (Trauma)
3. Treat infections **empirically when appropriate** (e.g., in life threatening sepsis without culture report or confirmed diagnosis, candida vaginitis post-antibiotic use).

   **AGAIN:** know WHEN to culture, but also know EMPIRIC treatments

**What you should study:**

This Key Feature overlaps with Priority Topic Antibiotics Key Feature 5

✓ Aseptic and Bacterial Meningitis AAFP 2017
✓ Septic Shock AAFP 2013   **Table 3: Empiric Antimicrobial Recommendations**
✓ BCCA Febrile Neutropenia Guidelines 2015

4. **Look for infection** as a possible cause in a patient with an **ill-defined problem** (e.g., confusion in the elderly, failure to thrive, unexplained pain [necrotizing fasciitis, abdominal pain in children with pneumonia]).

   **Recognize atypical presentations of infection**

**What you should study:** I was unable to find a resource that addressed this issue in any population other than the elderly.

✓ Current Diagnosis and Treatment: Geriatrics Chapter 7 Atypical Presentations available via Access Medicine

5. When a patient returns after an original diagnosis of a simple infection and is **deteriorating or not responding to treatment**, think about and **look for more complex infection**. (i.e., When a patient returns complaining they are not getting better, don’t assume the infection is just slow to resolve).

**What you should study:** Always reassess diagnosis in patient who is not improving. These are a few common infections with dangerous mimics.

✓ Cellulitis and soft tissue infections AIM 2018
✓ Pharyngitis AIM 2012
6. When treating infections with antibiotics use other therapies when appropriate (e.g., aggressive fluid resuscitation in septic shock, incision and drainage abscess, pain relief).

This is something you will have to know, but it comes with clinical exposure.

✓ Just Do It!