July 2018

Priority Topic: **PNEUMONIA**

Key Features:

The definitive resource for pneumonia is the IDSA guideline (unfortunately it is a bit old and long, but it is being updated - projected publication summer 2018 and can be broken down by the key features). Check it out: Pneumonia CAP Guidelines IDSA 2007

For shorter reviews, read the AAFP or AIM articles: CAP in adults - diagnosis and management AAFP 2016 Community Acquired Pneumonia AIM 2015

 In a patient who presents without the classic respiratory signs and symptoms (e.g., deterioration, delirium, abdominal pain), include pneumonia in the differential diagnosis.

What you should study:

- ✓ Pleuritic chest pain sorting through the differential AAFP 2017
- ✓ CAP in adults diagnosis and management AAFP 2016
- ✓ CAP in children AAFP 2012
- 2. In a patient with signs and symptoms of pneumonia, do not rule out the diagnosis on the basis of a normal chest X-ray film (e.g., consider dehydration, neutropenia, human immunodeficiency virus [HIV] infection).

What you should study: this is a great article!

✓ Les pneumonies dévoilées pas la radiographe MduQ 2016

3. In a patient with a diagnosis of pneumonia, assess the risks for unusual pathogens (e.g., a history of tuberculosis, exposure to birds, travel, HIV infection, aspiration).

What you should study:

- ✓ Community Acquired Pneumonia AIM 2015 see the table on page 5
- ✓ CAP in Adults diagnosis and management AAFP 2016
- ✓ Pulmonary infections in the returned traveller BMC 2017
- 4. In patients with pre-existing medical problems (e.g., asthma, diabetes, congestive heart failure) and a new diagnosis of pneumonia :
 - a) Treat both problems concurrently (e.g., with prednisone plus antibiotics).
 - b) Adjust the treatment plan for pneumonia, taking into account the concomitant medical problems (e.g., be aware of any drug interactions, such as that between warfarin [Coumadin] and antibiotics).

What you should study:

- ✓ INESSS Community Acquired Pneumonia in Adults
- ✓ INESSS Pneumonie a cquise en communauté chez l'adulte
- ✓ Clinically significant drug interactions AAFP 2000
- ✓ Antibiotic Warfarin interactions
- 5. Identify patients, through history-taking, physical examination, and testing, who are at high risk for a complicated course of pneumonia and would benefit from hospitalization, even though clinically they may appear stable.

What you should study:

- ✓ Community Acquired Pneumonia AIM 2015
- \checkmark Pneumonia Severity Scores

6. In the patient with pneumonia and early signs of respiratory distress, assess, and reassess periodically, the need for respiratory support (bilevel positive airway pressure, continuous positive airway pressure, intubation) (i.e., look for the need before decompensation occurs).

What you should study:

✓ Community Acquired Pneumonia AIM 2015 - who should go to ICU

7. For a patient with a confirmed diagnosis of pneumonia, make rational antibiotic choices (e.g., outpatient + healthy = first-line antibiotics; avoid the routine use of "big guns").

What you should study:

- ✓ INESSS Pneumonie acquise en communauté chez l'enfant de 3 mois et plus
- ✓ INESSS Community Acquired Pneumonia in Adults
- ✓ INESSS Pneumonie acquise en communauté chez l'adulte
- ✓ Uncomplicated Pneumonia management in children CPS 2015
- ✓ Pneumonia Peds PIR 2013

- 8. In a patient who is receiving treatment for pneumonia and is not responding:
 - a) Revise the diagnosis (e.g., identify other or contributing causes, such as cancer, chronic obstructive pulmonary disease, or bronchospasm), consider atypical pathogens (e.g., *Pneumocystis carinii*, TB, and diagnose complications (e.g., empyema, pneumothorax).
 - b) Modify the therapy appropriately (e.g., change antibiotics).

What you should study:

- ✓ CAP in adults diagnosis and management AAFP 2016
- ✓ Quand la pneumonie n'évolue pas comme prévu MduQ 2016
- ✓ A l'attaque contre les bactéries multirésistantes des poumons MduQ 2016
- ✓ Diagnostic approach to pleural effusion AAFP 2014
- ✓ Corticosteroids for presumed pneumocystis AAFP 2013
- 9. Identify patients (e.g., the elderly, nursing home residents, debilitated patients) who would benefit from immunization or other treatments (e.g., flu vaccine, Pneumovax, ribavarine) to reduce the incidence of pneumonia.

What you should study:

- ✓ Community Acquired Pneumonia AIM 2015
- ✓ Effectiveness of pneumococcal vaccines AAFP 2018

10. In patients with a diagnosis of pneumonia, ensure appropriate follow-up care (e.g., patient education, repeat chest X-ray examination, instructions to return if the condition worsens).

11. In patients with a confirmed diagnosis of pneumonia, arrange contact tracing when appropriate (e.g., in those with TB, nursing home residents, those with legionnaires' disease).

What you should study:

- ✓ Tuberculosis (I can imagine the College asking questions on TB)
- ✓ Update on Latent TB AAFP 2014
- ✓ TB Guidelines AAFP 2018
- ✓ Legionella
- Emerging respiratory pathogens (perhaps not on the exam, but you should be aware...)