Priority Topic: **ASTHMA**

**Key Features:**

*For a single source of info on this topic: *(amazing but don’t cover acute care)*

- **ADULTS:** Asthma in Adults JAMA 2017
- **PEDS:** Pediatric Asthma in a Nutshell AAP 2014

1. In patients of all ages with respiratory symptoms (acute, chronic, recurrent):
   a) Include asthma in the differential diagnosis.
   b) Confirm the diagnosis of asthma by appropriate use of:
      - history.
      - physical examination.
      - spirometry.

**What you should study:** make a differential of RESP symptoms

- ✓ Asthma AIM 2014
- ✓ Asthma in Adults JAMA 2017
- ✓ Approach to Interpreting PFTs AAFP 2014

2. In a child with acute respiratory distress, distinguish asthma or bronchiolitis from croup and foreign body aspiration by taking an appropriate history and doing a physical examination.

**What you should study:**

- ✓ EM Cases Episode 79: Pediatric Asthma
- ✓ EM Cases Digest Vol 2: Pediatric Emergencies, Chapter 13: Asthma
- ✓ Diagnosis and Management of Asthma in Preschoolers CPS Statement
- ✓ Asthma Handbook of Australia: Diagnosis in Children

*parts of this chart are clickable for more information*
3. In a known asthmatic, presenting either because of an acute exacerbation or for ongoing care, objectively determine the severity of the condition (e.g., with history, including the pattern of medication use, physical examination, spirometry). Do not underestimate severity.

**What you should study:**

✓ Asthma in Adults JAMA 2017 Figure 2
✓ PRAM Score for Pediatric Asthma (designed by McGill’s own Peds ER staff Dr Dominic Chalut in 2000, and now used worldwide!)

4. In a known asthmatic with an acute exacerbation:

   a) Treat the acute episode (e.g., use beta-agonists repeatedly and early steroids, and avoid under-treatment).

   b) Rule out co-morbid disease (e.g., complications, congestive heart failure, chronic obstructive pulmonary disease).

     **Note that co-morbidities are a risk factor for asthma-related death! Look for things like cardiac problems, pneumonia, smoking, etc.

   c) Determine the need for hospitalization or discharge (basing the decision on the risk of recurrence or complications, and on the patient’s expectations and resources).

**What you should study:**

✓ Managing Peds Acute Asthma CPS Statement 2012 (versions anglais/français)
✓ Acute Asthma Exacerbations in Adults AAFP 2011 Table 2 and Figure 2 includes list of risk factors for asthma-related death
✓ Leukotriene antagonists in acute asthma AAFP 2016 (1-pager)
5. For the **ongoing (chronic) treatment** of an asthmatic, propose a stepwise management plan including:

   - self-monitoring.
   - self-adjustment of medication.
   - when to **consult back**.

**What you should study:** make sure you know how to treat stable asthma

✓ Asthma in Adults JAMA 2017 *(treating stable asthma)*
✓ Asthma Medications 2016 *(pictures of puffers)*

**Multiple options for action plans:**

✓ Asthma Action Plan AAFA 2018
✓ Asthma Action Plan Australia 2015
✓ Asthma Action Plan Lung Association

6. For a known asthmatic patient, who has **ongoing or recurrent symptoms**:

   a) Assess **severity** and **compliance** with medication regimens.

   b) Recommend **lifestyle adjustments** (e.g., avoiding irritants, triggers) that may result in less recurrence and better control.

**What you should study:** assessment of severity covered above

✓ Ask about compliance, consider having your patients document puffer use
✓ How to use your puffer at asthma.ca
✓ Asthma BC Guidelines 2015 Appendix A: Lifestyle

**EM CASES RAPID REVIEWS: 7-10 min VIDEOS**

- Pediatric Asthma Part 1
- Pediatric Asthma Part 2
Review: You should know...

- diagnosis by Hx, Px, and spirometry in adults
- diagnosis by Hx and Px in peds
- severity assessment in peds and adults
- managing stable asthma in peds and adults (meds and follow up)
- managing acute exacerbations in peds and adults