



# Asthma

Color index :

**Important**

Further explanation

[Editing link](#)

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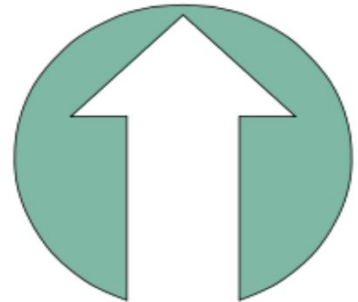
## ❖ Case scenario:

A 25-year-old woman presents with shortness of breath. She reported that in high school, she occasionally had shortness of breath and would wheeze after running. She experiences the same symptoms when she visits her friend who has a cat. Her symptoms have progressively worsened over the past year and are now a constant occurrence. She also finds herself wheezing when waking from sleep approximately twice a week.

- First you need to know who is at **high** risk for asthma and who is at **low** risk:

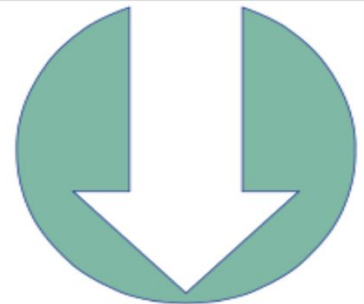
### CLINICAL FEATURES THAT INCREASE THE PROBABILITY OF ASTHMA

- More than one of the following symptoms: wheeze, breathlessness, chest tightness and cough, particularly if:
  - symptoms worse at night and in the early morning
  - symptoms in response to exercise, allergen exposure and cold air
  - symptoms after taking aspirin or beta blockers
- History of atopic disorder
- Family history of asthma and/or atopic disorder
- Widespread wheeze heard on auscultation of the chest
- Otherwise unexplained low FEV<sub>1</sub> or PEF (historical or serial readings)
- Otherwise unexplained peripheral blood eosinophilia



### CLINICAL FEATURES THAT LOWER THE PROBABILITY OF ASTHMA

- Prominent dizziness, light-headedness, peripheral tingling
- Chronic productive cough in the absence of wheeze or breathlessness
- Repeatedly normal physical examination of chest when symptomatic
- Voice disturbance
- Symptoms with colds only
- Significant smoking history (ie > 20 pack-years)
- Cardiac disease
- Normal PEF or spirometry when symptomatic\*



- So our patient is considered to have high probability of having asthma let's take the history now by addressing the following:

## 1. Symptoms if there is

- Cough, Wheezing, Shortness of breath, Chest tightness or Sputum production?

## 2. Pattern of symptoms

- perennial, seasonal, or both
- Continual, episodic, or both
- **Onset, duration, frequency** (number of days or nights, per week or month)
- Diurnal variations, especially **nocturnal and on awakening in early morning**

## 3. Precipitating and/or aggravating factors

- Viral respiratory infections
- Environmental allergens, indoor (e.g., mold, house-dust mite, cockroach, animal dander or secretory products) and outdoor (e.g., pollen)
- Smoking (patient and others in home or daycare)
- Exercise
- Occupational chemicals or allergens
- Environmental change (e.g., moving to new home; going on vacation; and/or alterations in workplace, work processes, or materials used)
- Irritants (e.g., strong odors, air pollutants, occupational chemicals, dusts and particulates, vapors, gases, and aerosols)
- Emotions (e.g., fear, anger, frustration, hard crying or laughing, fear, anger, frustration)
- Drugs (e.g., **aspirin**; and other nonsteroidal anti-inflammatory drugs, **beta-blockers** including eye drops, others)
- Changes in weather, exposure to **cold air**
- Comorbid conditions (e.g. sinusitis, rhinitis, gastro esophageal reflux disease)

## 4. Family history

History of asthma, allergy, sinusitis, rhinitis, eczema, or nasal polyps in close Relatives

## 5. Social history

- Daycare (if child), workplace, and school characteristics that may interfere with adherence
- Social factors that interfere with adherence, such as substance abuse
- Social support/social networks
- Level of education completed
- Employment

## 6. Medical history

- if diagnosed with asthma before >When was diagnosed, based on what?
- how many admission(s)
- does he / she admitted ever to the ICU - how does he / she control the attack
- does he / she receive corticosteroid therapy (when, why, how long)
- current medication (aspirin or beta blockers)
- any complication of either the illness or the treatment?

## 7. Systemic review



**Asthma definition** Asthma is a chronic inflammatory disorder of the airways that causes recurrent episodes of coughing, wheezing, breathlessness, and chest tightness. These episodes are usually associated with reversible airflow obstruction (airway hyper- responsiveness) either spontaneously or with treatment

**Asthma etiology** Asthma is known to be multifactorial in origin but there are two major factors in its development:  
**Atopy** (individuals who readily develop antibodies of IgE) and **increase responsiveness of the airway of the lung**

