

# Asthma

## MCQs

- ABG respiratory alkalosis?

### Asthma

- initial investigation (asthma or COPD one of them not sure ) :

### Spirometry ✓

- Which of the following is NOT in the list of bedside severity assessment of bronchial asthma? Select one:

- a. Kussmaul's sign
- b. Pulsus paradoxus
- c. Silent chest
- d. Central cyanosis
- e. Confusion

Increased jugular venous pressure with inspiration is commonly referred to as Kussmaul's sign; and the disappearance of the radial pulse or a drop in systolic blood pressure of 10 mmHg or greater with inspiration is recognized as pulsus paradoxus.

- Which of the following drugs is NOT used in acute severe asthma?

- a. Long-acting anti-cholinergic
- b. Salbutamol
- c. Systemic Corticosteroids
- d. Ipratropium bromide
- e. Magnesium sulphate IV infusion

- A 46 years old woman with persistent asthma comes to the emergency department with Tachycardia 120 b/min Tachypnea 28 breath/min she cannot complete one sentence with Bilateral generalized inspiratory and expiratory rhonchi Which of the following drugs is NOT used in this situation?

- a. Leukotriene modifiers
- b. Nebulized salbutamol
- c. Systemic Corticosteroids
- d. Nebulized ipratropium bromide e intravenous magnesium

- A 30 year-old patient with asthma complains of daily wheezing and occasional waking at night with cough and chest tightness for three weeks. His usual medication is salbutamol. The next step in management is?

- a. Add long-term theophylline
- b. Increase salbutamol
- c. Add ipratropium bromide
- d. Add beclomethasone
- e. Discontinue salbutamol and begin prednisone and taper over 2 weeks

- Which of the following statement is incorrect :
  - a) Cough can be the only presenting complaint in patient with asthma
  - b) Asthma control should be assessed at every clinic visit
  - c) Dx of asthma should be considered in patient who present recurrently with wheezing following upper respiratory tract infection
  - d) Salbutamol tablets should not be prescribed to asthmatics
  - e) Patient with stable asthma do not need follow up**
  
- A patient reports that he is using a high dose inhaled steroid along with a short acting beta-agonist for asthma, but continues to experience shortness of breath and wheezing. Which of the following should be added to this patient's treatment regimen?
  - a) Zafirlukast
  - b) Theophylline
  - c) Long acting beta-agonist**
  - d) Omalizumab (Anti-IgE)
  - e) Oral steroids
  
- scenario of asthma exacerbation one is true regarding of this patient:
 

**flattening of diaphragm ??!!!**
  
- one is wrong regarding severe asthma attack :
 

**kPa of o<sub>2</sub> is more than 10**
  
- Asthma excacerbation
 

**we don't use antibiotics for acute management**
  
- Regarding the pathogenesis of bronchial asthma, one of the following is specific for the disease:
  - a. Air flow limitation
  - b. Airway hyper-responsiveness**
  - c. Inflammation of the mucosa
  - d. Peak flow variability
  - e. Brochioalevolar eosinophils

• ONE of the following drugs is LEAST used in treatment of acute sever asthma.

- a- nebulized B2 agonist
- b- i.v hydrocortisone
- c- epinephrin (adrenaline)**
- d- oxygen
- e- i.v . aminophylline

• All the following criteria indicate sever asthma Except.

- a. silent chest
- b. respiratory rate of 20/ min.**
- c. hypercapnia
- d- thoracoabdominal respiration
- e- confusion

• All of the followings are useful for the assessment of the severity of an attack of bronchial asthma, EXCEPT :

- a. Spirometry .
- b. Methacholine test**
- c. ABG (arterial blood gases)
- d. Peak expiratory flow rate
- e. Physical examination.

Answer: B. Methacholine tes: methacholine challenge test: a test that involves the inhalation of increasing concentrations of methacholine, a potent bronchoconstrictor, in patients with possible bronchial hyperreactivity; usually performed when a diagnosis of asthma or bronchospastic lung disease is not clinically obvious. Source: Stedman's.

• Atopic bronchial asthma is characterized by all of the followings EXCEPT:

- a. Positive family history .
- b. Positive immediate reaction to skin prik test to allergens.
- c. Elevated IgE level .
- d. Affects patients after age of 40.**
- e. Elevated serum eosinophils count.

Answer: D. Onset of asthma early in life.

• All of the followings are true regarding home monitoring with the PEFr except

- a-Usefull in diagnosing asthma
- b- Usefull in Identifying environmental triggers of asthma
- c- Can detect early signs of deterioration before symptoms change.
- d-Long term monitoring is useful for severe brittle asthma .
- e- It is less effort dependent than spirometry .**

• The treatment of Bronchial asthma by Anti-inflammatory agents may cause all of the following except:

a-It reduces symptoms .

b-It improves lung function .

C-It decreases BHR (bronchial hyper reactivity).

d-It improves quality of life

**e- It may cure the patient from the disease .**

• Treatment of bronchial asthma by Leukotriene pathway modifiers is more effective in which of the following conditions ?

**a- aspirin and exercise induced asthma .**

b-Cough variant asthma .

c-Old age asthmatics .

d- Nocturnal asthma

e-Female asthmatics.

• Regarding the pathogenesis of bronchial asthma, one of the following is specific for the disease:Air flow limitation

a. Airway hyper-responsiveness

**b. Inflammation of the mucosa**

c. Peak flow variability

d. Brochioalveolar eosinophils

# Mini-OSCE

# Q7

- PFT of obstructive lung disease, non smoker and attacks of dyspnea triggered by cold
- Diagnosis?
  - Asthma
- X-ray findings?
  - can be normal or hyperinflated and increase translucency
- The patient also complained from scleroderma presented with dyspnea and Sat 81, Dx?
  - Lung fibrosis
  - Management?
    - CPAP, lung transplant