

الترم الثاني / الفرقة الثانية  
2017/2018

طب حالات مرضية

**Answer ALL the following questions :**

**(be time minded according to the mark mentioned for each question):**

د/إسلامة

**Question (1):** Give an account on :

إطالة نوم المريض

(a) General management of comatose patients  
(8 marks)

**Management of comatose patient:**

**(1) Airway:** assessment of airway adequacy should take the first priority

security of the airway will depend on level of consciousness...this should be assessed by the patient response to command and physical stimulation and whether a gag reflex is present  
Protection of the airway may need oropharyngeal airway or endotracheal intubation in comatose patients

Patient presented with medical coma may be nursed on his side (in the coma position)

Traumatic patients should be assumed to have a potential cervical spine injury and must be nursed with the cervical spine in the neutral position and / or with a rigid collar until an injury is excluded by radiological studies

All patients with disturbed consciousness must receive supplemental oxygen

**(2) Ventilation (Breathing):** it is important to ensure optimal gas exchange and avoid hypoxia and hypercapnea:

PaO<sub>2</sub> more than 80 torr and PCO<sub>2</sub> of 35-40 torr is desirable

If spontaneous ventilation effort is not adequate to achieve these levels , mechanical ventilatory support may be necessary

**(3) Circulation:**

Restoration of arterial blood pressure, correction of dehydration , and hypovolemia and urgent attention of life threatening causes of shock

**(4) Specific treatment :** according to the underlying cause of coma

**(5) Nursing care:**

- Meticulous eye and mouth care
- Regular change of limb position
- Limb physiotherapy, elastic stokes for DVT
- Alternating air mattress (for bed sores)
- Broncheal toilet

- Enteral feeding via nasogastric tube

**(b) Pulmonary embolism: clinical picture, investigations, and treatment (7 marks)**

-dyspnoea	80%.
-Chest pain	65%.
-Diaphoresis and cough	40%.
-Palpitation	30%.
-Syncope	10%.
-Haemoptysis	10-15%.

**Table 1. Risk Factors for Venous Thromboembolism.**

Age >40 yr
History of venous thromboembolism
Surgery requiring >30 min of anesthesia
Prolonged immobilization
Cerebrovascular accident
Congestive heart failure
Cancer
Fracture of pelvis, femur, or tibia
Obesity
Pregnancy or recent delivery
Estrogen therapy
Inflammatory bowel disease
Genetic or acquired thrombophilia
Antithrombin III deficiency
Protein C deficiency
Protein S deficiency
Prothrombin G20210A mutation
Factor V Leiden
Anticardiolipin antibody syndrome
Lupus anticoagulant

Diagnosis :

D dimer

D.dimer is the final degradation product induced by clotting events in the coagulation cascade.

V-Q Scan

The perfusion part of the scan is achieved by injecting the patient with technetium 99m, which is coupled with macro aggregated albumin (MAA). This molecule has a diameter of 30 to 50 micrometers, and thus sticks in the pulmonary capillaries.

Sufficiently few molecules are injected for this not to have a physiological effect. An embolus shows up as a cold area when the patient is placed under a gamma camera. The MAA has a half life of about 10 hours

Spiral C.T

Advantages

Non invasive.

Widely available.

Provides quick results within 20-30 minutes..

Minimally invasive.

Provides concurrent visualization of the lung parenchyma, pleura , and mediastinal structures.

### **Management of Pulmonary embolism**

Patients with pulmonary embolism presents with a wide spectrum of illness, and appropriate care and include :

(1) prevention of PE (by anticoagulation alone, elastic stocking, mobilization, physiotherapy)

(2) treatment by heparine , antiplatelets , thrombolytic therapy (streptokinase)

(3) prevention of PE in patients with DVT (deep venous thrombosis ) by insertion of IVC filter)

(4) Embolectomy in selected cases

**Question (2)** (15 marks) **(refere to the lecture ( powerpoint ) )**

Give an account on the following items in cardiopulmonary resuscitation:

- Basic life support
- Drugs used in management during cardiopulmonary resuscitation

**Question (3):** Give an account on : *(refere to the lecture ( powerpoint))*

- (a) Mechanical ventilation: indications and common ventilation moods used in ICU (10 marks)
- (b) Panic attacks and ICU psychosis in ICU (5 marks)

**Question (4):** Discuss the following :

- (a) Clinical picture and management of acute myocardial infarction (10 marks) *(refere to the lecture ( powerpoint))*
- (b) Bronchial asthma: definition , clinical picture and management (5 marks)

## **Bronchial asthma**

It is a clinical syndrome characterized by :

- (1) recurrent episodes of airway obstruction resolve spontaneously or by ttt
- (2) exaggerated bronchconstriction response to a variety of stimuli that has little or no effect in normal subjects
- (3) airway inflammation

(NB: airwy obstruction is largely reversible in most patients unlike COPD) .....

However, this may be irreversible in some settings

Bronchial asthma (cont.)

**Precipitating factors :**

Cold air , humidity

Exercise

Smoking, dust , house dust mite, cockroach, perfumes, car exhaust fumes, industrial gases and dusts, cat furs, pets , allergic foods.....

Drugs

Bronchial asthma (cont.)

Symptoms:

Wheezy dyspnea

Sense of chest tightness

Cough

**Acute severe asthma:**

Inability to complete a sentence in one breath

Respiratory rate > 25 breath / min

Heart rate > 110 beat / min

Systolic BP less than 100 mmHg, or diastolic BP less than 60 mmHg

Bronchial asthma (cont.)

**Life threatening asthma:**

Very weak respiratory effort

Cyanosis

Bradycardia or severe hypotension

Arterial PO<sub>2</sub> less than 60 mmHg or PCO<sub>2</sub> more than 50

Falling or low PH (respiratory acidosis)

Exhaustion . Confusion , or coma

Bronchial asthma (cont.)

Treatment: (ttt of acute attack + asthma controller)

Oxygen therapy..... Mechanical ventilation

Bronchodilators (inhaled , or by nebulizer)

Corticosteroids (inhaled or/and IV)

Other asthma controllers