Myocardial Infarction & Angina Pectoris



*Stable angina* (upon exertion or stress)

*Unstable angina* (can manifest in the absence of exertion or stress)

*myocardial infarction* is similar to that of angina but more severe and prolonged

**Signs & Symptoms:**

* crushing pain in the chest (may radiate to upper extremities, neck or to the jaw)
* Skin becomes pale
* Nausea and vomiting
* Anxiety increases heart rate and blood pressure
* Shortness of breath

**Management:**

* Setting position or any comfortable position for the patient, if faint or feel faint should be laid flat
* Glyceryl Trinitrate (GTN) spray or tablets sublingually
* oxygen (10-15 litres per minute)
* Nitrous oxide to relieve anxiety
* Reassure the patient to relieve further anxiety
* Check the vital signs
* Give aspirin in a single dose of 300 mg orally (Medical staff should be made aware that aspirin has already been given)

Airway Obstruction (Choking & aspiration)

  
**Causes:**

Foreign body, Blood, vomitus, water, saliva in mouth or tongue

**Signs & Symptoms:**

* Patient grabs at throat
* abdominal movements
* If conscious may cough & complain of difficulty breathing
* may become cyanosed and lose consciousness

**Management:**

* upright position (if conscious), supine position (if unconscious)
* Encourage the patient to cough, If unable to cough but remain conscious deliver sharp back blows, followed by abdominal thrusts if the foreign body has not been dislodged
* remove any visible foreign bodies from mouth & pharynx using High volume suction
* if patient unconscious place on the floor, Head tilt/chin lift, If obstruction caused by fluids use suction, Open mouth with thumbs, abdominal thrusts, If not breathing attempt CPR (not for circulatory support but the to dislodge the foreign body
* If large pieces of foreign material have been aspirated, refer to hospital as an emergency for a chest x-ray

Hypotension



**Causes:**

stress, overdose of medication,  
 postural changes, coexisting disease  
 or hypovolemia

**Signs & Symptoms:**

* Weakness
* Decreased level of  
   consciousness
* nausea

**Management:**

* Stop dental treatment
* remove all foreign objects  
   from the patient’s mouth
* elevate the legs above the  
  level of the heart
* administer oxygen
* Monitor & record vital signs
* If patient does not respond Activate EMERGENCY   
  MEDICAL SERVICE

Epileptic Seizures



Make sure that the patient took normal dosage of anticonvulsant drugs before attending for dental treatment

**Signs & Symptoms:**

* Sudden loss of consciousness
* movements of the limbs; the tongue may be bitten
* lasts few minutes but may remain confused after regains consciousness

**Management:**

* supine position
* During convulsion, ensure that patient is not at risk from injury & do not put anything in mouth
* Give high flow oxygen
* Check blood glucose level to exclude hypoglycaemia,   
  give glucose if its suspected
* After convulsion, patient may be confused & need reassurance
* It may not always be necessary to transfer to hospital unless the convulsion was atypical, prolonged (or repeated), or if injury occurred
* Medication only given if seizures are 5 minutes or longer or recur in quick succession (IV diazepam by medical assistance personnel)

Hypertensive Crisis



**Signs & Symptoms:**

rise in systolic blood pressure to  
 200 mm HG or greater & the  
 diastolic pressure to   
120 mm HG or greater

**Management:**

Activate the EMERGENCY MEDICAL SERVICE & refer to hospital

Hospitalconsciousness

* nausea

**Management:**

* Stop dental treatment
* remove all foreign objects from the patient’s mouth
* elevate the legs above the level of the heart
* administer oxygen
* Monitor and record vital signs
* If patient does not respond Activate EMERGENCY MEDICAL SERVICE



Hypoglycemia



Make sure that the patient eat normally & take their usual dose of medications before any treatment.

**Signs & Symptoms:**

* Shaking & Sweating
* Headache
* Unconsciousness

**Management:**

* Semi-reclined position (if conscious), supine position (if unconscious)
* Measure the blood glucose   
  (if in doubt about hypoglycaemia, it might be advisable to give some form of glucose)
* If the patient is conscious, give drink with sugar or glucose tablets (If necessary, this may be repeated in 10 –15 minutes)
* If the patient is unconscious, or unable to swallow, give buccal glucose gel (*Hypostop*) and / or IM glucagon by paramedics (1 mg in adults & children > 8 years old or > 25 kg, 0.5mg if < 8 years old or < 25 kg)   
  and check vital signs  
  (once they are alert and able to swallow, give a drink containing glucose and if possible some food high in carbohydrate).
* Re-check blood glucose after 10 minutes to ensure that it has risen

### Breathing Problems Asthma / Bronchospasm

  
**Signs & Symptoms:**

* Inability to complete sentences in one breath
* Respiratory rate > 25 (Acute) or < 8 per minute (life threatening)
* heart rate > 110 per minute (Acute) or < 50 per minute(life threatening)
* Cyanosis
* Exhaustion & Confusion

**Management:**

* Upright position
* Maintain open airway
* Administer bronchodilator beta2-adrenoceptor stimulant inhaler such as salbutamol (Repeat doses may be necessary)
* While waiting for medical assistance –oxygen (10-15 litres per minute) should be given.   
   4–6 activations from the salbutamol inhaler should be given using a large-volume spacer device and repeated every 10 minutes
* if signs of life threatening asthma --- injection of adrenaline 1:1000 can be used as 0.5 ml. (by paramedics)

Emergencies on Dental Chair

Allergic & Anaphylactic Reaction

  
**Signs & Symptoms:**

* Cutaneous reactions
* Angioedema of the lips,  
   eyelids, face & extremities
* Bronchospasm
* Hypotension

**Management:**

* Administer oxygen &   
  monitor vital signs
* Identify & remove allergen
* for mild reactions give Antihistamines orally (25mg-50mg) and continue a 6-8   
  hours for the next 3 days
* for less severe cases with   
  only difficulty in breathing   
  give salbutamol inhaler
* For severe reactions with  
   airway and/or circulation problems, give IM 0.5 ml of 1:1000Adrenaline (Antero-  
  lateral aspect of the middle   
  third of the thigh) by  
   paramedics or use  
   auto-injector (Epipen)   
  of 0.3 ml of 1:1000   
  adrenaline
* All patients treated for an anaphylactic reaction should  
   be sent to hospital

### Syncope



**Signs & Symptoms:**Pre:

* dizziness
* Sweating
* Feels cold
* Pale
* Tachycardia

Syncope:

* loses consciousness
* Bradycardia

**Management:**

* Remove all objects from the patient’s mouth
* Place the patient in supine position with legs elevated and head at or below the level of heart (If patient is pregnant roll onto left side)
* Loosen tight clothing around the neck
* Oxygen by mask
* If unconscious for more than 1 minute, activate emergency service
* If the patient becomes unresponsive, check vital signs