



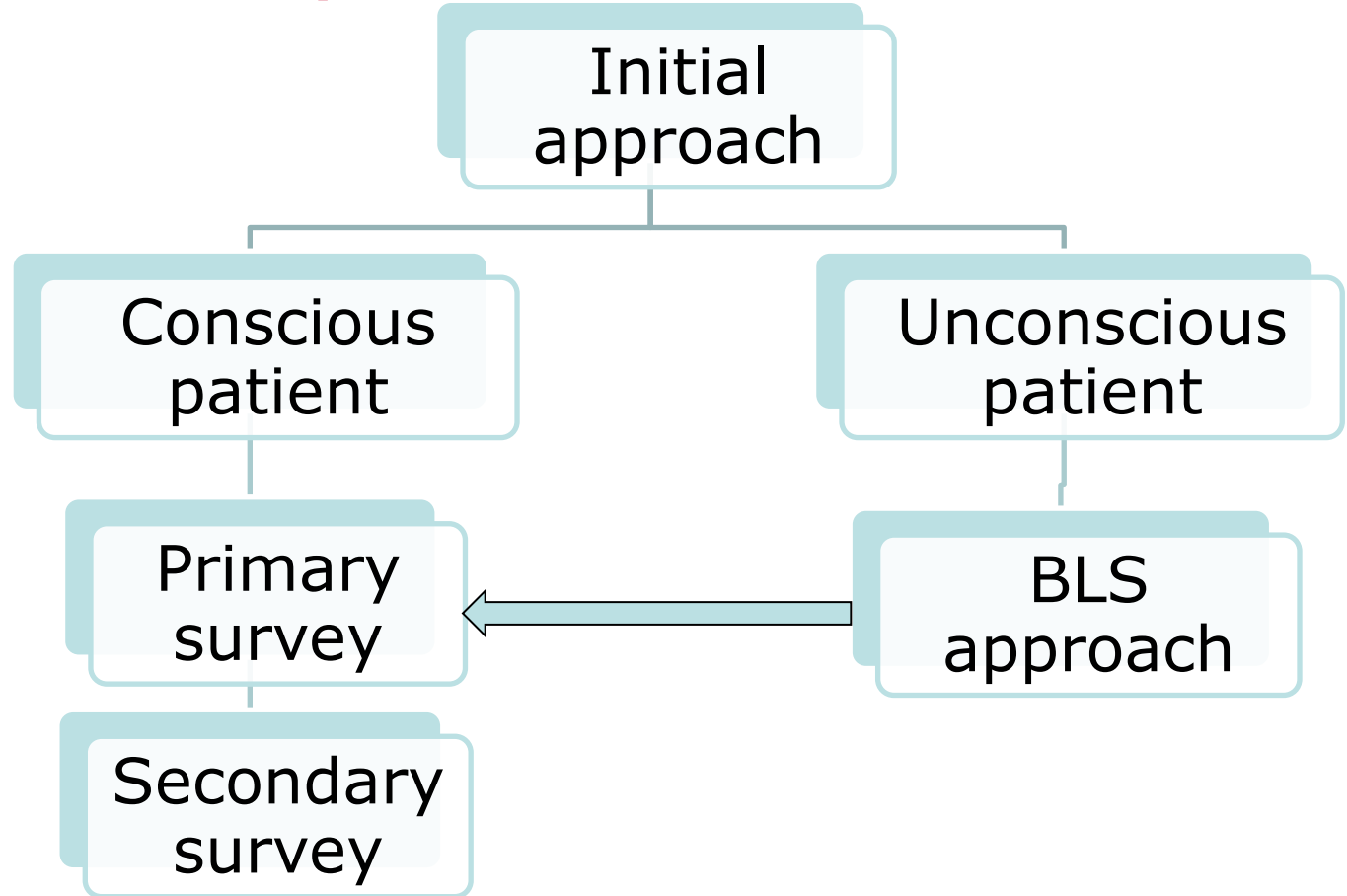
EMERGENCY

ABCDE APPROACH & SPECIAL CONSIDERATION

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Al-Shifa Medical Complex***

Systemic Approach



Why the ABCDE approach?

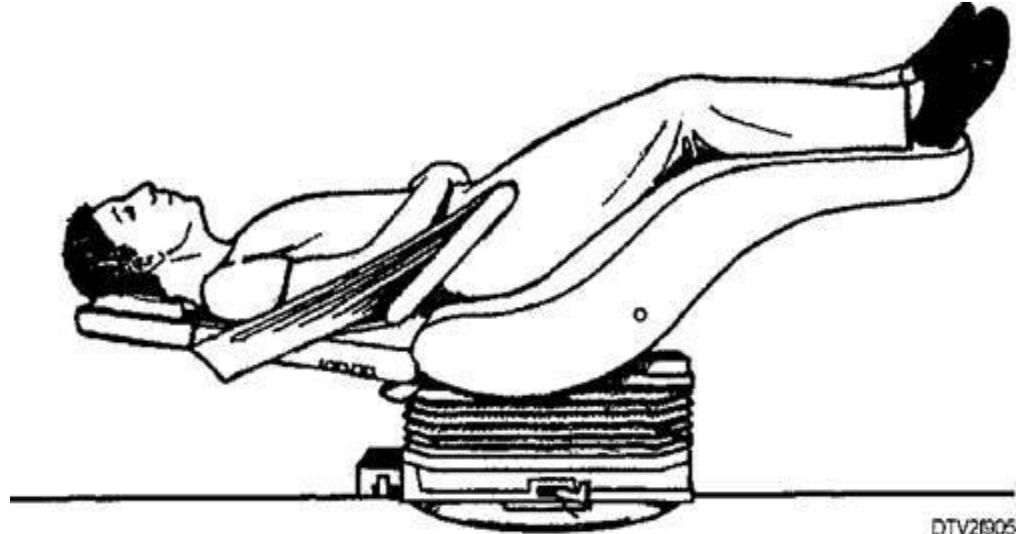
- Approach every patient in a systematic way
- Recognize life-threatening conditions early
- DO most critical interventions first - fix problems before moving on
- The ABCDE approach is very quick in a stable patient

Goals:

- Identify life-threatening conditions rapidly
- Ensure the airway stays open
- Ensure breathing and circulation are adequate to deliver oxygen to the body

Position

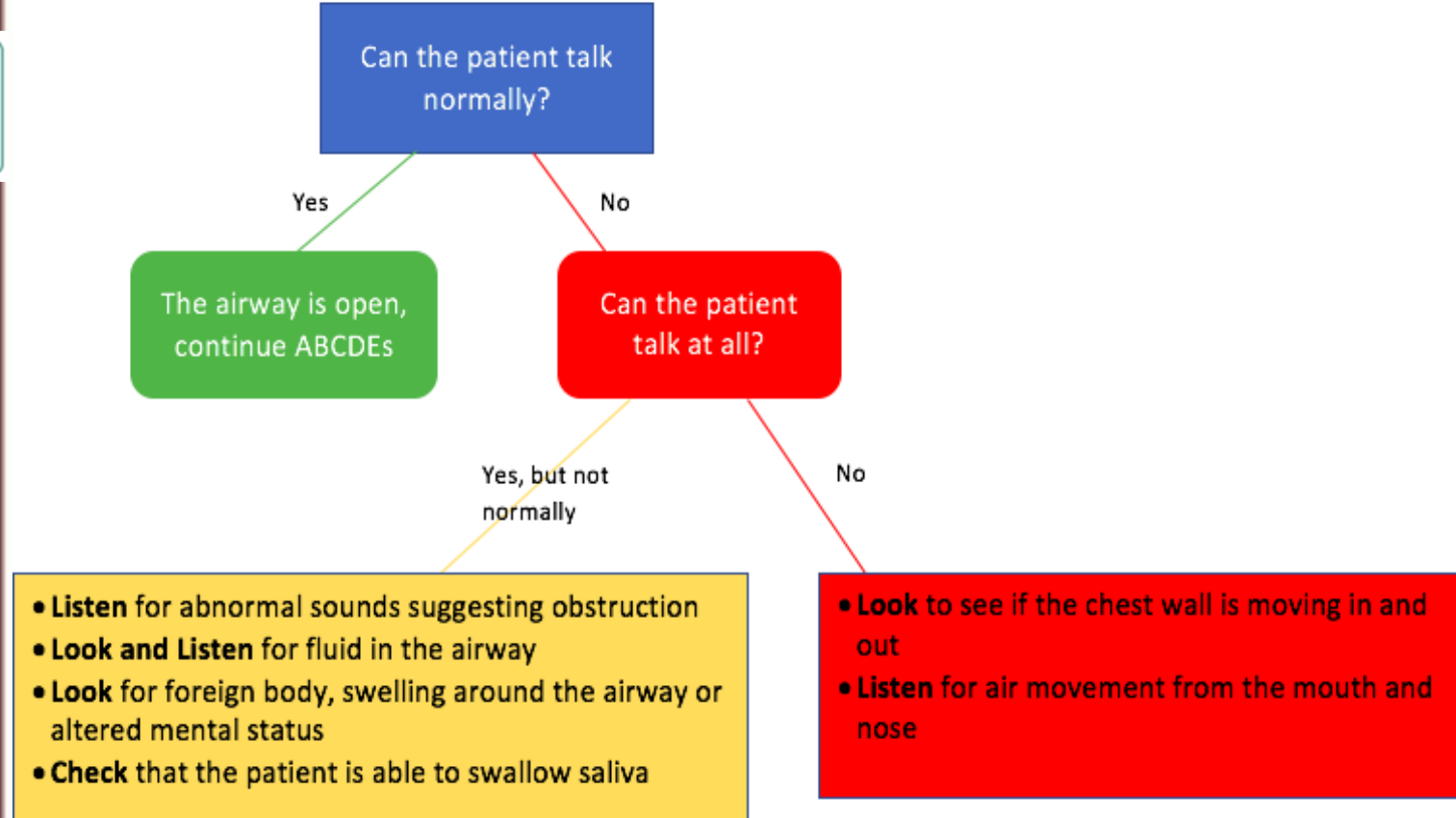
- Goal- optimize blood flow to brain
 - Conscious: semi-supine/comfortable
 - Unconscious: supine or Trendelenburg (feet elevated)





A

Airway Assessment





Airway Management

Basic Airway Management

- Open the mouth
- Suctioning the secretions
- Remove F.B if visible
- using HEAD-TILT/CHIN-LIFT or JAW-THRUST maneuver
- Consider placing an AIRWAY DEVICE to keep the airway open
 - Oropharyngeal airway
 - Nasopharyngeal airway

Advance Airway Management

- LMA
- Endotracheal intubation
- Surgical airway



Breathing: Assessment



Breathing assessment

Look	• Respiratory rate • Symmetrical chest movement • Respiratory distress • Paradoxical breathing (in trauma)
Listen	• Air entry on both sides of chest (decreased or absent breath sounds indicate chest pathology)
Feel	• Tracheal shift Opposite side: Hemothorax, pneumothorax Same side: Lung collapse • Chest wall tenderness • Percussion on the side with decreased air entry Hyperresonant: Pneumothorax, Dull: Hemothorax

Breathing: Management



B

Steps	Actions	Descriptions
1	Evaluate oxygen requirement	Following patient requires oxygen therapy 1. Respiratory rate more than 20 breath per minute 2. Oxygen saturation less than 94% in room air
2	Determine initial oxygen flow rate	1. RR 20-30 per minute: Give oxygen at 1-5 litres per minute 2. RR 30-40 per minute: Give oxygen at 6-10 litres per minute 3. RR more than 40 per minute: Give oxygen at 10-15 litres per minute
3	Choose appropriate oxygen delivery device	Start on 4. Nasal Prongs: 1-5 litres per minute (RR Up to 20-30 per min) 5. Face mask: 6-10 litre per minute (Up to 30-40 per min) 6. Non-rebreathing mask: 10-15 litre per minute (More than 40)



Circulation: Assessment

- **Look, listen** and **feel** for signs of poor perfusion
 - Cool, moist extremities
 - Delayed capillary refill
 - Diaphoresis
 - Low blood pressure
 - Tachypnoea
 - Tachycardia
 - Absent pulses



Circulation: Management

- For cardiopulmonary arrest follow relevant CPR PROTOCOLS
- If poor perfusion:
 - Insert 2 large cannulas
 - GIVE IV FLUIDS



D

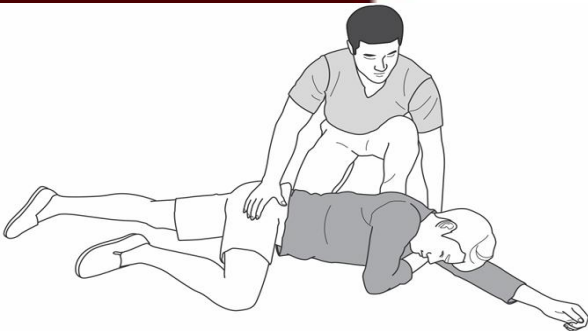
Disability: Assessment

- **Assess** level of consciousness
 - AVPU or GCS in trauma
- **Check** for low blood glucose (hypoglycemia)
- **Check** pupils (size, reactivity to light and if equal)
- **Check** movement and sensation in all four limbs
- **Look** for abnormal repetitive movements or shaking
 - Seizures/convulsions



Disability: Management

- If altered mental status, ABCDEs otherwise normal
 - place in RECOVERY POSITION
- If altered mental status, low glucose ($<3.5\text{mmol/L}$) or if unable to check glucose
 - Give GLUCOSE
 - If actively *seizing*
 - Give BENZODIAZEPINE
 - If pregnant and *seizing*
 - Give MAGNESIUM SULPHATE



Recovery position



D

Disability: Management

- If *small pupils* and slow breathing,
consider opioid overdose
 - Give NALOXONE
- If *unequal pupils*, consider
increased pressure in the brain
 - RAISE HEAD OF BED 30 DEGREES
 - Plan for early TRANSFER/
REFERRAL



Exposure: Assessment

- **Examine** the entire body for hidden injuries, rashes, bites or other lesions
 - *Rashes*, such as hives, can indicate an allergic reaction
 - Other rashes can indicate infection



Exposure: Management

- General exposure considerations
 - REMOVE constricting clothing and jewelry
 - COVER the patient to prevent hypothermia
 - Acutely ill patients may be unable to regulate body temperature
 - PREVENT hypothermia - Remove wet clothing and dry patient thoroughly
 - Respect the patient's modesty

TAKE A BREATH

A dark, blurry photograph of a person lying on a bench in a public space. A glowing sign with the word 'EMERGENCY' and a double-headed arrow is visible in the background. The image has a somber and urgent feel, with horizontal light streaks across the scene.

EMERGENCY

SPECIAL CONSIDERATION

Syncope

- Definition: temporary loss of consciousness (fainting)
- Causes: Cessation of blood flow to the brain
- Non cardiac
 - Vasovagal
 - Pain and anxiety
- Cardiac
 - Orthostatic
 - Dehydration and hypovolemia
 - Arrhythmia
 - Elderly (blunted baroreceptor response)
- Medications
- Hypoglycemia
- Unknown

Syncope

- Symptoms:
 - Pale Ashen-Grey Appearance
 - Sweaty
 - Nausea
 - Eyes Dilate
 - Convulsive Movements / twitching
- Treatment:
 - Position: Supine/feet elevated (usually respond in < 60 seconds)
 - Airway: Head tilt/jaw thrust
 - Breathing: Administer 100% oxygen (positive pressure is rarely needed)
 - Circulation: Monitor vitals (HR, BP)
 - Drugs (rarely needed)
 - Atropine adult 0.5 mg/Peds 0.02 mg/kg) IM/IV (bradycardia)

Hypoglycemia

- Definition:
 - defined as a blood glucose reading of less than 70 mg/dl (panic range: 50 mg/dl in males and < 40 mg/dl in females)
- Causes:
 - prolonged fasting
 - improper use of diabetic medications
- Signs and Symptoms:
 - shakiness, nervousness, tremor
 - palpitations, tachycardia
 - sweating, pallor, coldness, clamminess
 - hunger, nausea, vomiting
 - headache, impaired judgment, abnormal mental status, seizures, unconsciousness

Hypoglycemia

- Conscious patient
 - Administer oral glucose (20 grams)
 - Wait 15 minutes
 - If symptoms continue, recheck blood glucose and administer oral glucose until blood glucose is >80 mg/dl
- Unconscious patient
 - No IV access:
 - 1 mg glucagon (IM/SQ)
 - Check blood glucose in 15 min
 - If patient regains consciousness give oral carbohydrate and bread exchange
 - Check blood glucose in 15 minutes
 - Repeat oral treatment until blood glucose >80 mg/dl
 - If patient does not regain consciousness, start IV and administer 50-100 of D10
 - IV access:
 - administer 50-100 of D10
 - Check blood glucose in 5 min
 - If patient regains consciousness give oral carbohydrate and bread exchange
 - Check blood glucose in 15 minutes
 - Repeat oral treatment until blood glucose >80 mg/dl
 - If patient does not regain consciousness, administer 50-100 of D10

Seizure

- Definition:
 - Excessive/abnormal electrical discharge in the brain resulting in sensory or motor disturbance with or without loss of consciousness

Goals:

- **ABCDE (protect airway)**
- **Termination of seizure**
- **Treat the cause if possible**

Seizure

- Recognize seizure activity and institute seizure precautions
 - Remove or pad hard or sharp objects from area
 - Do not force anything into the person's mouth
 - Apply monitors and assess ABC's
 - Recovery position

A: Maintain airway, remove dentures
B: Administer oxygen
- intubation/ventilation (if respiratory depression)
C: IV access/obtain blood samples
(Left lateral position to avoid aspiration)

Immediate management
Inj. Midazolam 3mg IV, or
Inj. Diazepam 10mg IV, or via rectal route
Repeat in 3-5 minutes if seizures persist.

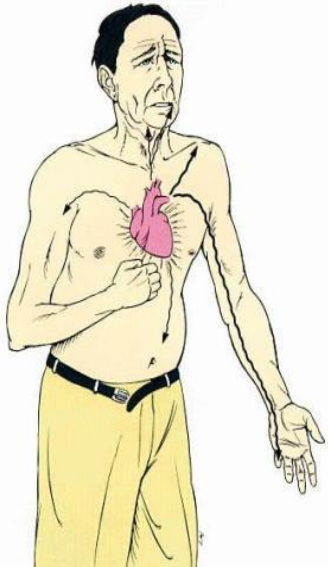
Treat causes

- Hypoglycaemia (Inj. 50% Dextrose 50 ml IV stat)
- Alcohol withdrawal (Inj. Thiamine 200mg IV stat)
- Eclampsia (Inj. Magnesium sulphate)
- Hyponatremia (Inj. 3%NS 100ml IV over 30 minutes)
- Reassess



Acute Coronary Syndrome

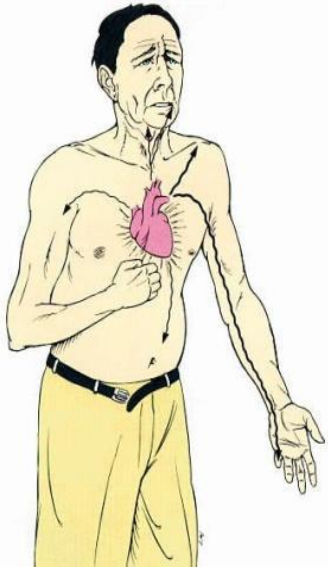
- Definition:
 - Angina is defined as a myocardial oxygen supply/demand imbalance secondary to narrowing of the arteries as seen in CAD.
- Causes:
 - Coronary artery disease
- Symptoms:
 - Chest pain (Not always): Radiating pain to the left shoulder, arm and lower jaw
 - Squeezing, burning, pressing, palpitation, "indigestion"





Management

- Position: comfortably
- Airway: Administer 100% oxygen
- Circulation: Monitor vitals (HR, BP)
 - Blood pressure/Heart rate usually goes up in a patient experiencing angina
- Drugs:
 - Administer Nitroglycerin (spray: 1-2 actuations or sublingual: 0.4mg)
 - administer one tablet every 5 minutes, if needed, as long as systolic pressure is > 90 mmHg up to a maximum of three doses (relieve usually within 1-2 minutes)
 - Administer chewable aspirin 160-325 mg
 - Administer normal saline if no pain relief from nitroglycerin
- Transport to ER



Hypertension

- Definition:
 - defined as blood pressure $>20\%$ of baseline or 140/90
- Signs and symptoms:
 - BP elevation
 - headache
 - tinnitus
 - dizziness
 - confusion

Hypertension

**SBP >180 mm Hg
And/Or
DBP >120 mm Hg**

**Hypertensive
emergency**

Yes

End Organ Damage??

No

**Markedly
elevated BP**

Conditions

- Aortic dissection;
- Severe pre-eclampsia or eclampsia;
- Pheochromocytoma crisis

Yes

No

**Intensify oral
antihypertensive and
arrange follow-up**

**Reduce SBP to <140 mm Hg during 1st h and
to <120 mm Hg in Aortic dissection**

**Reduce BP by max 25% over 1st h, then to 160/100–
110 mm Hg over next 2–6 h, then to normal over next
24–48 h**

Hypertension

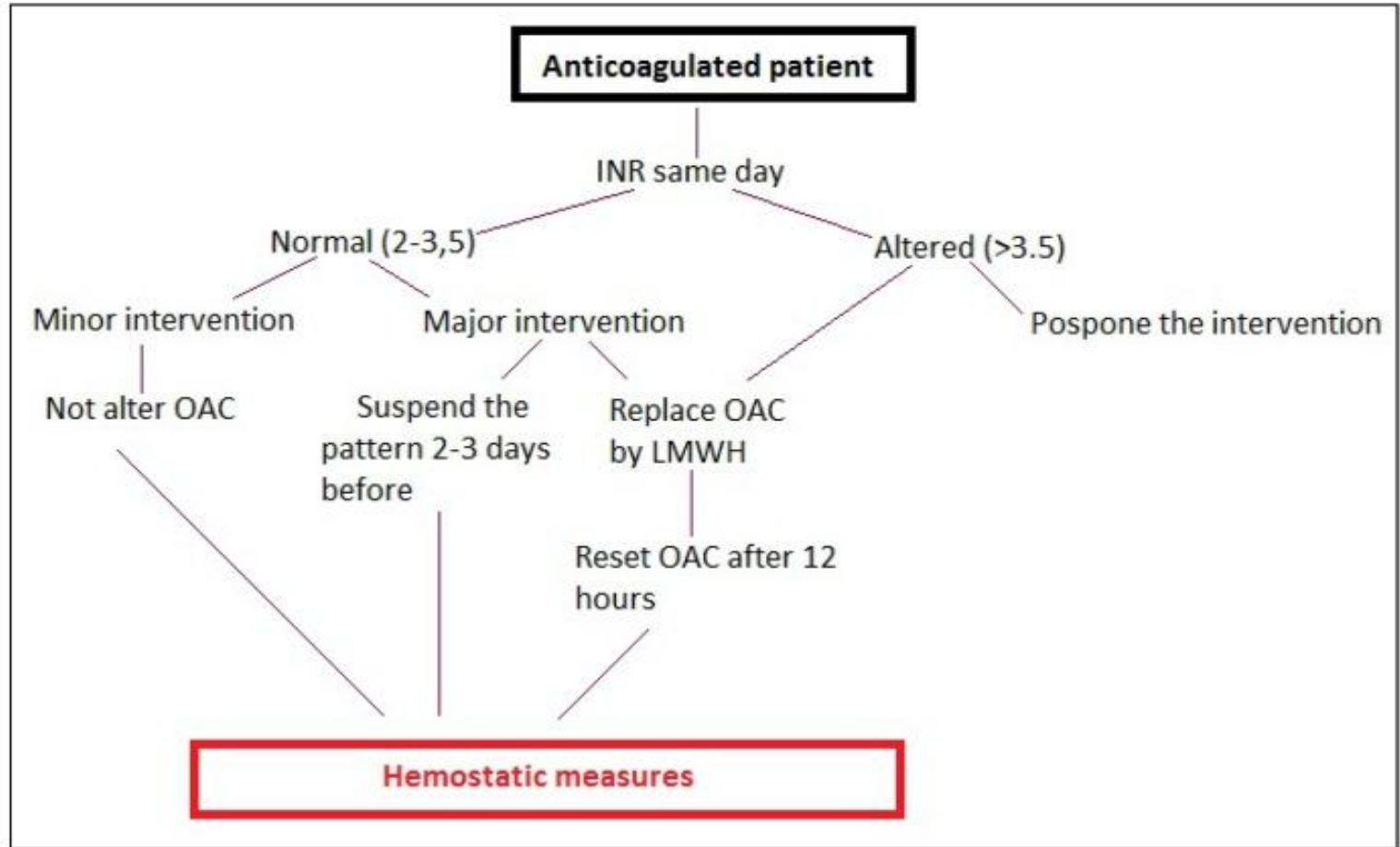
Oral Anti-HTN Drugs:

Drug	mg/Day
Captopril	12.5–150
Clonidine	0.1–0.8
Enalapril	5–40

IV Anti-HTN Drugs:

Drug	Dose
Nitroglycerin	Initial 5 mcg/min; increase in increments of 5 mcg/min every 3–5 min to a max of 20 mcg/min
Labetalol	Initial 0.3–1.0 mg/kg dose (max 20 mg) slow IV inj. every 10 min or 0.4–1.0 mg/kg/h IV infusion up to 3 mg/kg/h.
Hydralazine	Initial 10 mg via slow IV infusion (maximum initial dose 20 mg)

- General Recommendations for Pre-Procedure Warfarin Management
 - Routine dental cleaning: No warfarin hold necessary
 - Deep cleaning/scaling: Can hold warfarin 0-3 days
 - Root canal: No warfarin hold necessary
 - Fillings/caps/crowns: No warfarin hold necessary
 - Dental extractions/ oral surgery:
 - Single uncomplicated extraction: Can hold warfarin 0-3 days
 - Multiple molar extractions or oral surgery: Hold warfarin 3-5 days



Management algorithm for patients with anticoagulation therapy scheduled for invasive dental treatment. OAC: oral anticoagulant; LMWH: low molecular weight heparin

← Emergency

Thank you