FACIAL, UPPER AERODIGESTIVE TRACT & NECK TRAUMA
APPROACH TO THE TRAUMA PATIENT:

- Triage
- Primary Survey (ABCDE)
- Resuscitation
- Adjuncts to Primary survey
- Secondary Survey (head-to-toe evaluation and history)
- Adjuncts to the Secondary Survey
- Continued monitoring and re-evaluation
- Definitive Care
PRIMARY SURVEY

Airway
- Ventilation
- Oxygenation

Breathing

Circulation
INADEQUATE DELIVERY OF OXYGENATED BLOOD TO THE BRAIN AND OTHER VITAL STRUCTURES IS THE QUICKEST KILLER OF THE INJURED.
The anatomical area(s) involved & the type of trauma will determine the symptoms, signs & management.
Place, equipment available, & skills of the medical attendant will determine level of management
WHICH PATIENTS ARE AT RISK?

- Head injury (altered level of consciousness)
- Maxillo-facial trauma
- Neck trauma (blunt/penetrating)
- Laryngeal trauma
- Chest trauma
CAUSES OF AIRWAY OBSTRUCTION

Foreign bodies (dentures, food)

Vomitus

Blood

Displacement of structures

Avulsion of structures

Haematoma (intra-, extraluminal)

Oedema
DIAGNOSIS OF AIRWAY OBSTRUCTION/PROBLEM RECOGNITION

History

the “talking patient” provides reassurance
(at least for the moment)
• the airway is patent,
• ventilation is intact,
• brain perfusion is adequate

the “silent patient”

Clinical examination • What do you see, hear and feel?
SYMPTOMS & SIGNS OF AIRWAY OBSTRUCTION (cont.)

- Anxious
- Agitated
- Position preference
- Sweating
- Cyanosis
- No chest movement
- Asymmetry of chest…
- Intercostal recession
- Suprasternal recession
- Subcostal recession
- Absent or < lung sounds
- Total airway obstruction
SYMPTOMS & SIGNS OF AIRWAY OBSTRUCTION

• Hot potato voice
• Snoring
• Hoarseness
• Stridor (3 types)

ANY NOISY BREATHING = AIRWAY OBSTRUCTION
SYMPTOMS & SIGNS OF AIRWAY OBSTRUCTION cont.

- Tenderness
- Crepitus
  
  Surgical emphysema

- Masses / Swellings
- Displacement of structures
Airway Management

• Maintenance
  • Chin lift
  • Jaw thrust
  • Oropharyngeal airway
  • Nasopharyngeal airway

• Definitive airway
  • Endotracheal intubation
  • Surgical airway
    • Needle Cricothyroidotomy
    • Surgical Cricothyroidotomy
    • Tracheostomy
CLEAR THE AIRWAY

HEIMLICH (multiple trauma)
MAINTAIN THE AIRWAY

[Diagram of blocked and open airways with labeled parts]

[Device image]
“CREATE” AN AIRWAY
WHEN TRYING TO INTUBATE, TAKE A DEEP BREATH..... STOP BREATHING & ATTEMPT INTUBATION....... THE MOMENT YOU MUST BREATHE, RESUME BAG VENTILATION!
ORO-TRACHEAL INTUBATION

Beware – neck stability?
NASO-TRACHEAL INTUBATION

NASOGASTRIC TUBE!!!!!!

NASOTRACHEAL INTUBATION!!!!!!
CRICO-THYROIDOTOMY

(Can be performed anywhere!)
TRACHEOSTOMY

(Only perform in a hospital setting)
TRACHEOSTOMY TUBES
Correct positioning is essential!

Displacement can happen!

It can obstruct!

(Tracheostomy can kill!)
DEATHS FROM AIRWAY PROBLEMS AFTER TRAUMA OFTEN (USUALLY) RESULT FROM:

Aspiration of gastric contents or foreign material

Failure to recognize the need for an airway

Inability to establish an airway

Failure to recognize an incorrectly placed airway

Displacement of an already established airway

Failure to recognize the need for ventilation
LATER

X-rays
CT scan
direct laryngoscopy
tracheoscropy
oesophagscopy
etc.
SYMPTOMS & SIGNS OF FOOD PASSAGE OBSTRUCTION

Drooling
Dysphagia
Odynophagia
CONCLUSION

• Actual or impending airway obstruction should be suspected in all injured patients
• With all airway manoeuvres the cervical spine must be protected by in-line immobilization
• Clinical signs suggesting airway compromise should be managed by securing a patent airway
• A definitive airway should be inserted if there is any doubt on the part of the doctor as to the integrity of the patient’s airway
• Surgical airway is indicated whenever an airway is needed and intubation is unsuccessful