

AIRWAY MANAGEMENT



ISAAC A DADZIE
Anaesthetic Nurse
Northwick Park Hospital
Harrow UK
2007

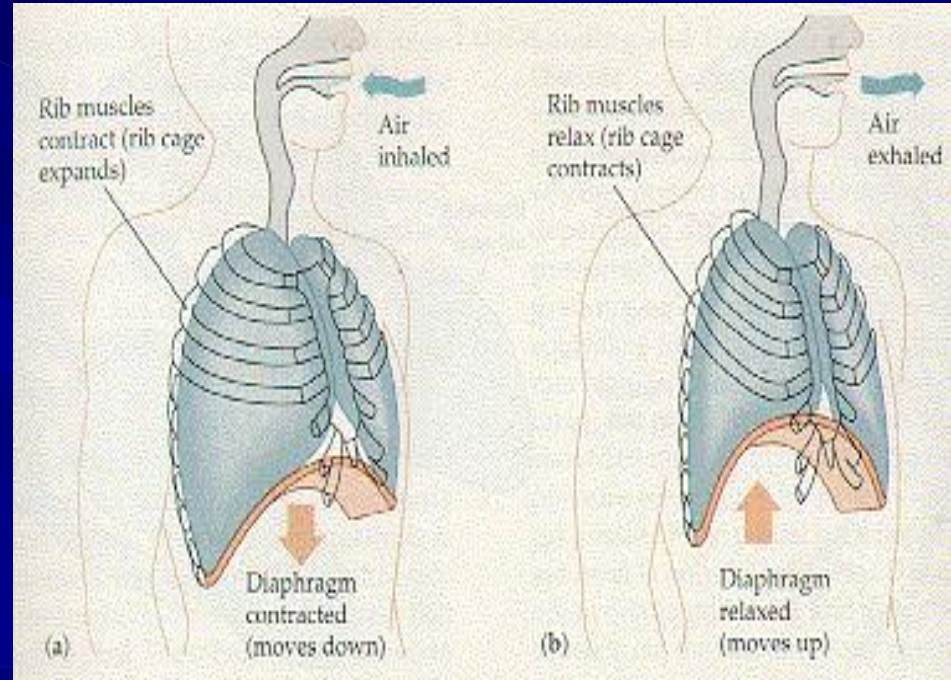
OBJECTIVES

- Review of Anatomy & Physiology Of The Respiratory System
- Anatomical differences between the adult and paediatric airway
- Common causes of airway obstruction and the clinical manifestations
- Management

STRUCTURES FORMING THE AIRWAY

These are divided into structures forming

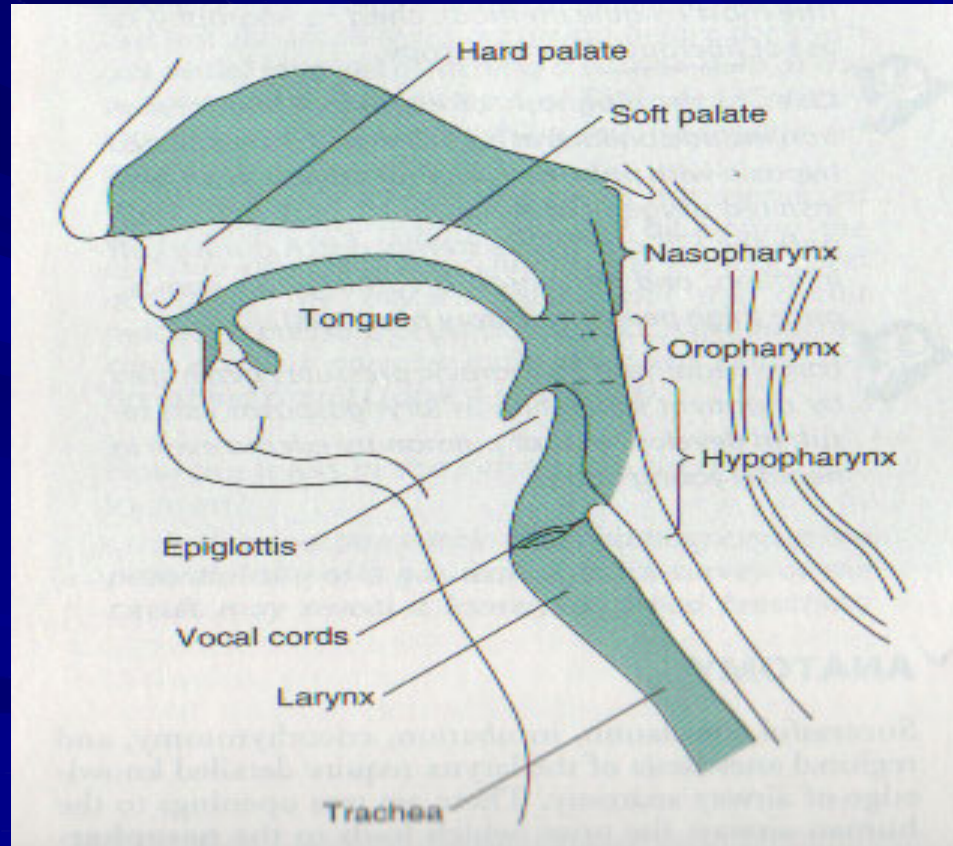
1. Upper Airway
2. Lower Airway



UPPER AIRWAY

Structures include:

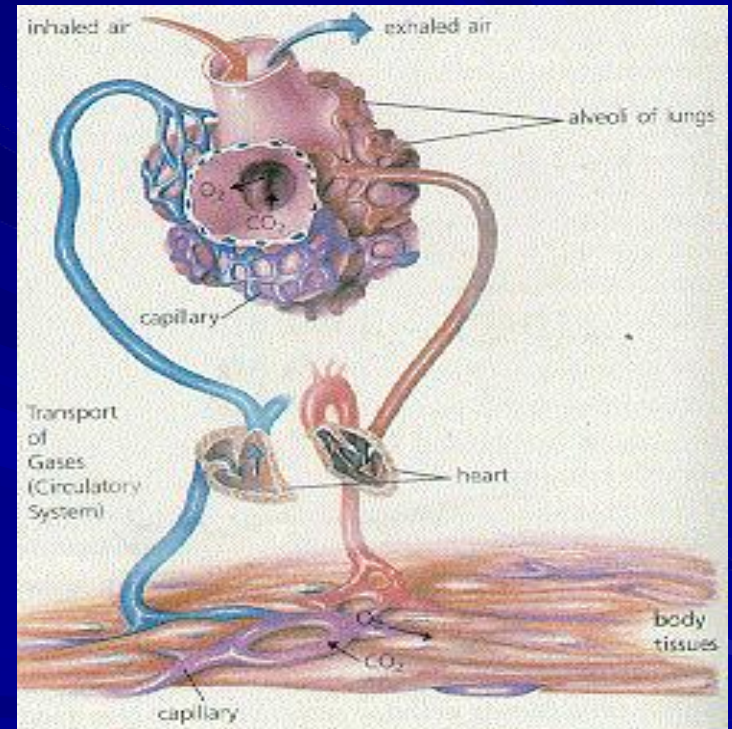
- Nose
- Pharynx
- Larynx
- Trachea



LOWER AIRWAY

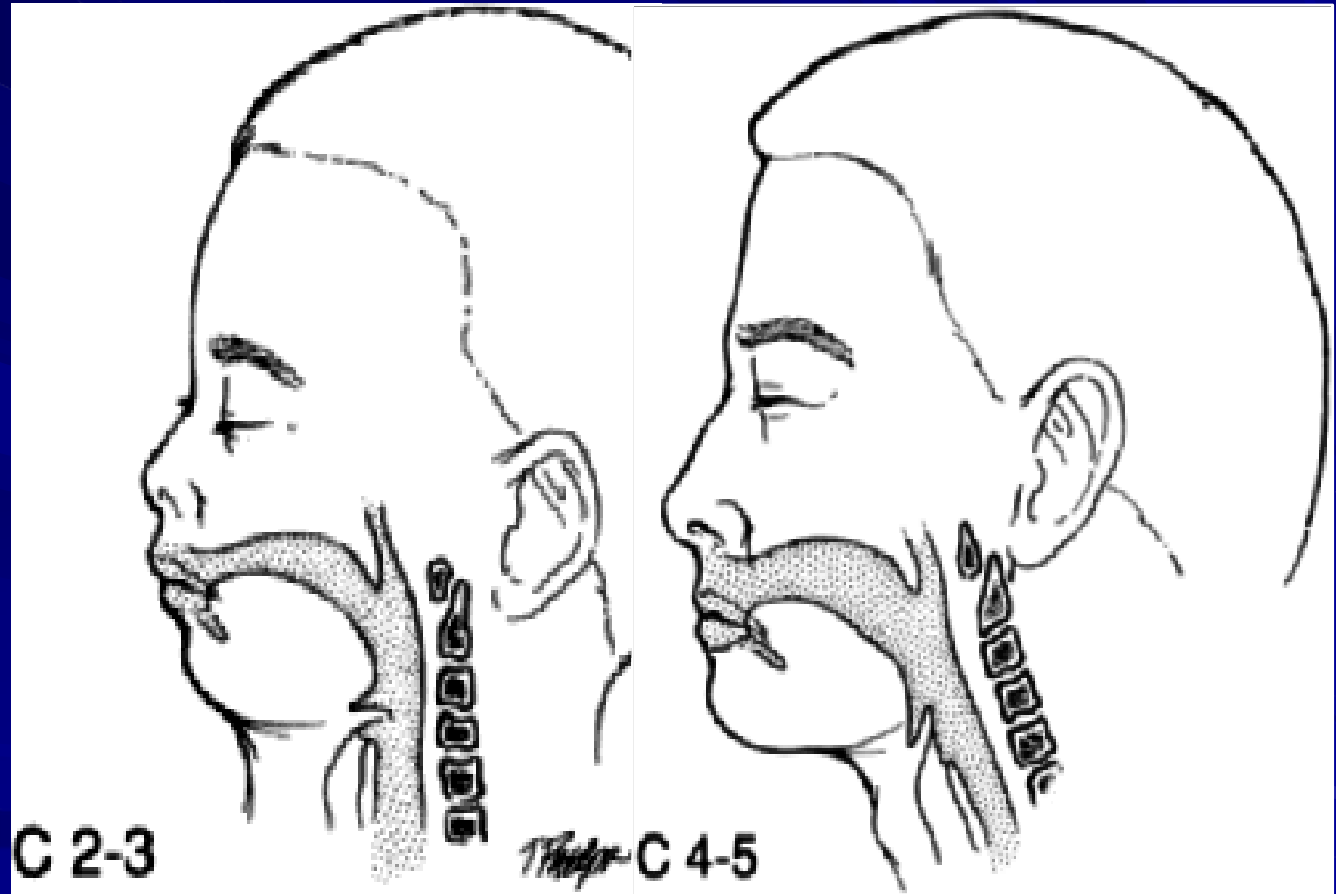
Structures forming the lower airway include:

- a) The conducting airway
- b) The respiratory zone



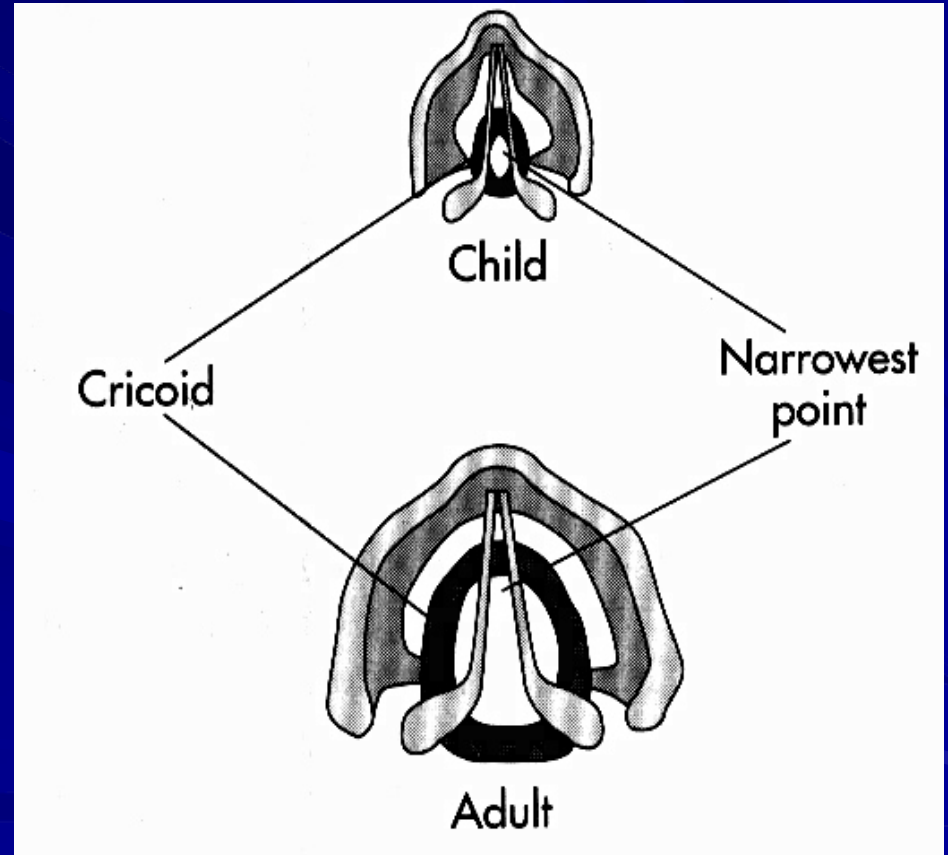
UNIQUE FEATURES IN PAED AIRWAY

- Tongue
- Epiglottis
- Larynx
- Trachea
- Chest wall



NARROWEST PART OF THE AIRWAY

- Subglottic in paededs
- At the level of the the vocal cords



CONTROL OF BREATHING

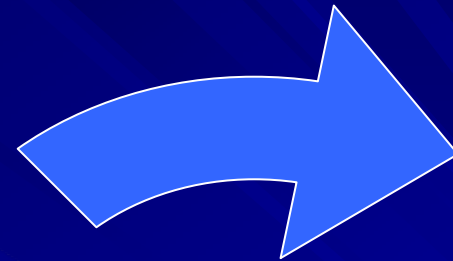
The respiratory centre can be divided into:

- Inspiratory centre {medulla}
- Expiratory centre {pons}

Inspiration

Expiration

Pause

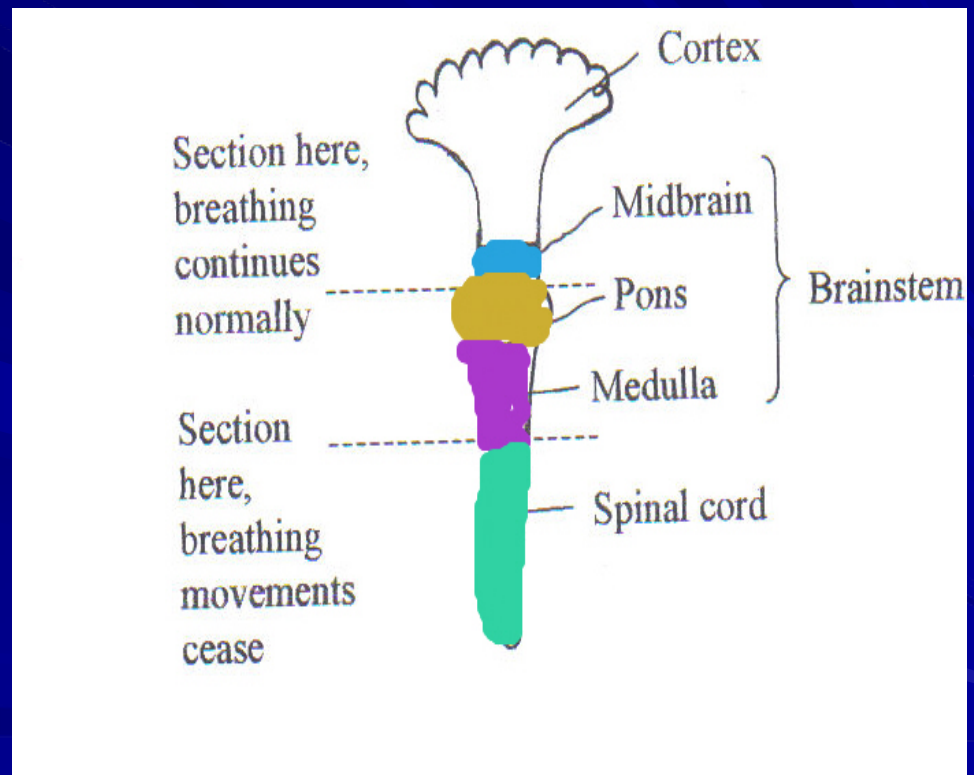


SO HOW DO WE BREATHE?

■ The system is complex and involves:

■ Mechanical means

■ Chemical means



COMMON CAUSES OF AIRWAY OBSTRUCTION

Upper airway

- Tongue (due to unconsciousness)
- Soft tissue swelling
- Blood, vomit
- Direct injury
- Foreign bodies

Lower airway

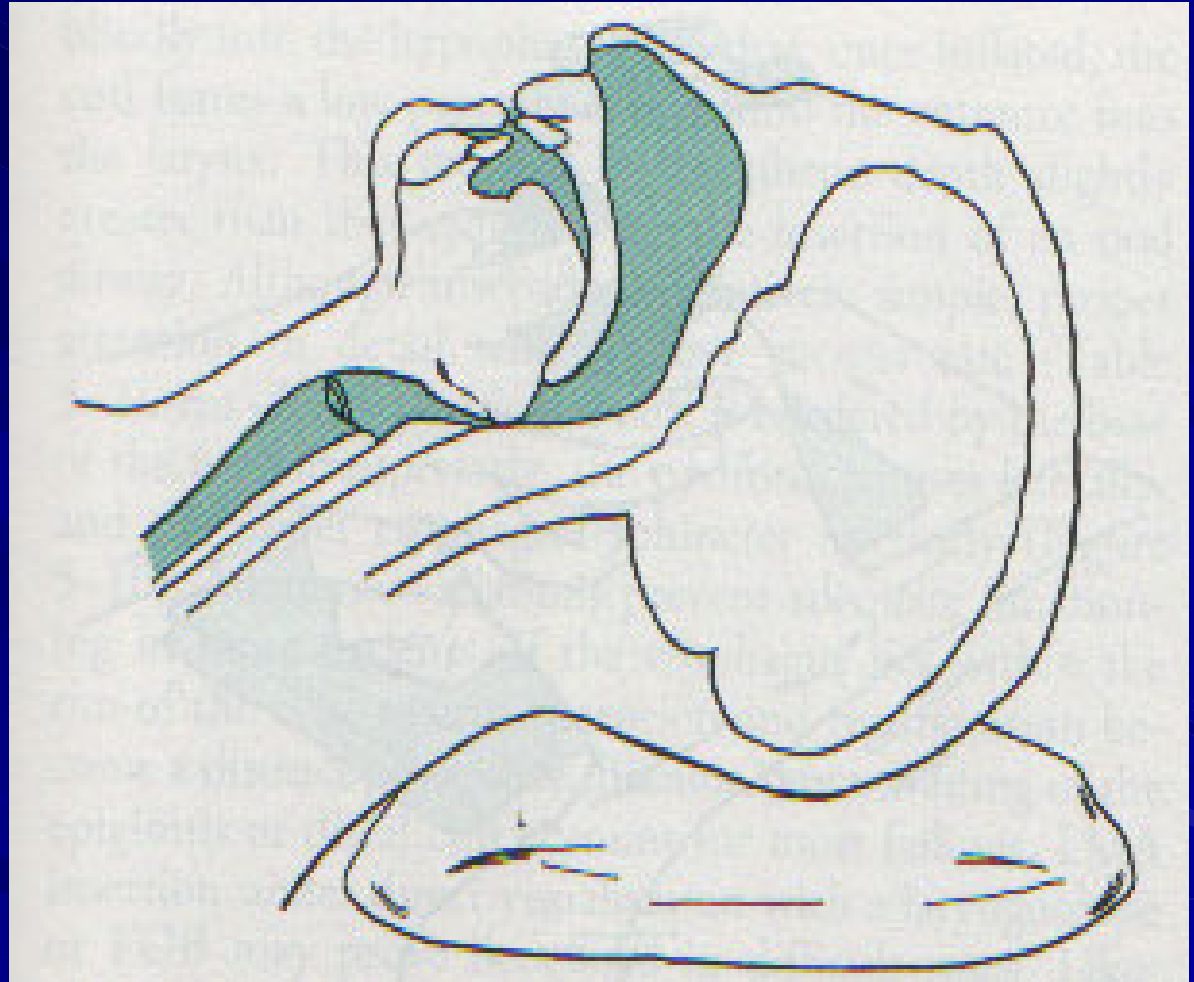
- Secretions, oedema, blood
- Bronchospasm
- Aspiration of gastric contents

RECOGNITION OF AIRWAY OBSTRUCTION

- **LOOK** → chest / abd movement
- **LISTEN** → Breath sounds/abnormal sounds
- **FEEL** → at the mouth/ nose for expired air

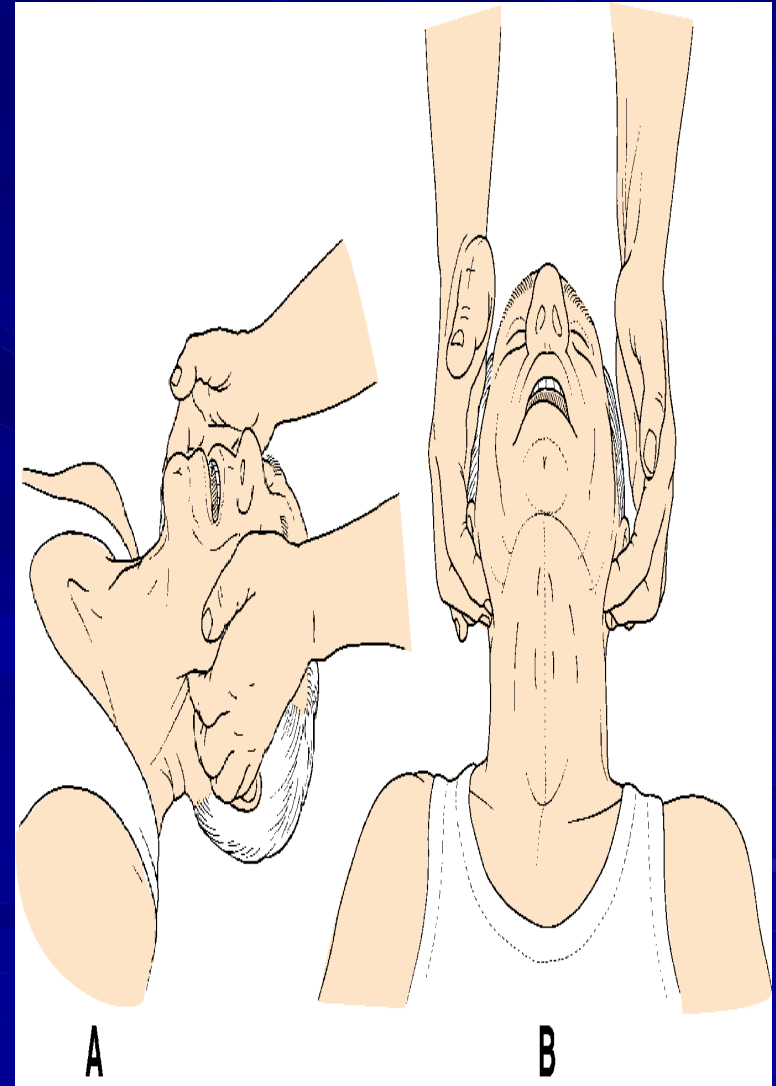
Abnormal airway sounds

- Snoring
- Stridor
- Gurgling
- Wheezing
- Silent



MANAGEMENT

- Head tilt, Chin lift
- Jaw thrust
- Suction
- Give 100% O₂
- Ventilate if no chest movement
- Intubate



THE TEN COMMANDMENTS OF EMERGENCY AIRWAY MANAGEMENT

1. Remain calm
2. Always bag-mask ventilate, don't rush to intubate
3. Call for help early
4. Have an organised "game plan"
5. If you can't ventilate: intubate
6. Keep track of time
7. If your first attempt intubation doesn't work, think what to do differently the second time to succeed
8. If you can't intubate: ventilate
9. If you can't ventilate and can't intubate open the neck
10. Practice, Practice Whenever You Can

Emergency Nursing