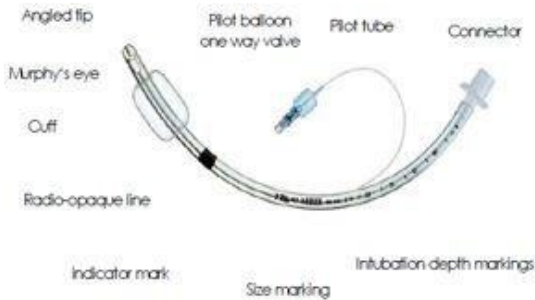


The endotracheal tube

Aim: To introduce non-anaesthetic trainees to the endotracheal tube and its components for working on the ICU
Scope: Adult patients intubated on the ICU

Components and sizing



Components:

- Connector – universal size 15mm fits all 22mm female connectors
- Intubation depth markings in cm increments
- Size marking
- Indicator mark should be where vocal cords sit
- Radio-opaque line to show on X-ray
- Cuff
- Murphy's eye allows ventilation if bevel abuts tracheal wall
- Pilot balloon and one way valve allows assessment of cuff pressure

- Size is given as the internal diameter in millimetres
- Larger diameter reduces resistance to flow therefore reducing airway pressure and barotrauma
- **Male: 8-9**
- **Female: 7-8**
- ETT may be cut to reduce dead space and improve CO2 clearance

Cuff pressures

- All ETT cuffs are large volume low pressure to reduce the risk of pressure necrosis in the trachea
- Normal cuff pressure is 20-30cmH2O
- Routinely measured by nursing staff using the manometer
- High pressures may indicate cuff damage, herniation through the cords or faulty valve

