

Confirmation of ET Tube Placement

Procedure

Douglas County KS EMS System

March 2022

Approved Provider: Paramedic

Reference Protocols: [CAPE](#)

Indications

All endotracheal intubations must have objective confirmation of correct placement.

Contraindications

None

Precautions

No one clinical sign is an absolute indicator of proper endotracheal tube placement.

Clinical signs of placement

- *See, See, Hear, Hear, CO2 Mnemonic*
 - See the endotracheal tube passing through the vocal cords into the trachea.
 - See chest rise
 - Hear no epigastric sounds
 - Hear bilateral lung sounds
 - ETCO2 number and waveform
- Breath sounds equal (high in midaxillary line); if breath sounds decreased on left, consider right mainstem intubation and pull endotracheal tube back and recheck.
- Observe for tube condensation.
- Compliance of bag.
- Observation of pink membranes and patient improvement.
- Gastric contents in endotracheal tube imply esophageal intubation.

Issues with ET tube after placement.

- Check these things if issues arise after placement of ET tube
- *DOPE Mnemonic*
 - Displacement of tube
 - Obstruction (tube or lungs)
 - Pneumothorax
 - Equipment failure

Documentation

- Confirmation methods and results initially
- Confirmation methods and results at destination prior to handoff to ER

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Notes

- Head movement has been shown to dislodge correctly placed and secured endotracheal tubes. Consider securing the head with a c-collar and head block device to restrict movement.
- ***Confirm endotracheal tube placement after each patient movement.***
- None of the clinical signs are absolute; there are documented cases of unrecognized esophageal intubation
- "When in doubt, take it out" and assure oxygenation and ventilation.
- If an initial attempt at intubation results in esophageal intubation, the endotracheal tube may occasionally be left in the esophagus to provide a landmark for another attempt. However, this should not be done if it impedes BVM ventilation.