Cuffed ETTs are routinely used by anaesthetists for operative procedures at PCH. Cuffed ETTs are not routinely inserted by the neonatal team at PCH, though occasionally may be used under direction of the on duty NICU consultant.

Key Points

- The bedside nurse is to record the ventilator leak % (from ventilator screen) hourly on the bedside observation chart.
- The bedside nurse (or doctor) is to set/adjust the cuff pressure, as below, on admission from theatre/ ETT insertion and then 4 hourly or if the leak becomes consistently >20%. The cuff pressure should be recorded on the bedside observation chart.
- A cuff pressure of >20cmH₂O should never be used.
- The ETT should not usually be cut, but may be if ordered by the medical team.
- Deflate cuff prior to ETT re-adjustment or removal.
- 0cmH₂O is equivalent to a deflated Cuff.

Cuff Adjustment Procedure

Step 1: Connect the manometer, ETT balloon and 1 ml syringe using a 3-way tap as shown. The 3-way tap should be open to everything (ETT, syringe and the manometer).

Step 2: Press the red button on the back/side of manometer until the needle comes to 0cmH₂O.

Step 3: Observe the ventilator leak % reading for ~30secs. If leak is >20% then, using the syringe, introduce air into the cuff until the leak reads about 10%, ensuring the cuff pressure does not exceed 20cmH₂O. If the leak does not reduce sufficiently with a cuff pressure of 20cmH₂O, then discuss with medical team.
Cuffed Endotracheal Tube (ETT) Management

**Step 4:** Briskly detach the whole setup from ETT.

**Step 5:** Record the cuff pressure on bedside observation chart.

**Step 6:** Repeat the cuff adjustment in 4 hours or earlier if there is a consistent leak >20%.

**Note:** If the cuff pressure is 0cmH2O and the leak remains <20%, a cuff adjustment procedure is not necessary.