THE STUDY VAULT

Clinical Chaos

Inline Suctioning

SKILL SNAPSHOT

Purpose
- Removes retained secretions through a closed catheter while maintaining ventilation and PEEP.

When to use
- Visible/audible secretions, coarse sounds, sawtooth waveform, rising pressures, reduced tidal volume/SpO2, or ineffective cough - not on a routine schedule.

Supplies needed
- Closed suction catheter; PPE; oxygen/ventilator; pulse oximeter; stethoscope; sterile specimen trap if ordered.

PREP + PATIENT SETUP
- Verify need and catheter size; explain procedure.
- Assess breath sounds, SpO2, HR/rhythm, ventilator values, and secretion burden.
- Position head up if allowed; confirm catheter and

VAULT TIP
- A ventilator sawtooth pattern plus coarse sounds is a stronger cue than the clock: suction only when assessment shows need.

STEP-BY-STEP
1. Hand hygiene; identify patient; apply PPE.
2. Confirm suction regulator is connected and set per age, device, policy, and order.
3. Preoxygenate adult/pediatric patients using the ventilator function or prescribed method; avoid disconnecting the circuit.
4. Unlock/open the closed-suction control valve. Stabilize the artificial airway.
5. Advance catheter without suction to the measured/shallow depth or until resistance, then withdraw about 1 cm if resistance is met.
6. Apply suction only while withdrawing with a smooth rotating motion; keep each pass as brief as possible, generally no longer than 15 seconds.
7. Allow recovery and reoxygenation between passes. Reassess SpO2, HR/rhythm, BP, color, and ventilator tolerance.
8. Repeat only if secretions remain and the patient tolerates it; limit passes according to policy.
9. Do not routinely instill normal saline. Use only for a specific indication/order or protocol.
10. After the final pass, withdraw catheter completely into its sleeve.
11. Using the system flush port, rinse the catheter while suctioning per manufacturer instructions; keep flush fluid out of the airway.
12. Close/lock the valve. Return oxygen to the prescribed level.
13. Reassess breath sounds, SpO2, airway pressures, tidal volumes, and secretion clearance.

SAFETY REMINDERS
- Stop for severe desaturation, bradycardia/arrhythmia, distress, bleeding, or marked hemodynamic change.
- Preoxygenate; suction only when indicated.
- Catheter should not occlude more than half the ETT lumen in adults/children.
- Maintain airway security and closed circuit.

COMMON MISTAKES
- Applying suction while advancing.
- Deep suctioning when shallow suction is effective.
- Routine saline instillation.
- Repeated passes without recovery or reassessment.

DOCUMENTATION
- Indication and pre/post assessment.
- Oxygenation and ventilator response.
- Number and tolerance of passes.
- Secretion amount, color, consistency, odor.
- Specimen collected; adverse events/interventions.