Assisting for Intubation

Key Terms

INTRODUCTION:

Emergency intubation has been widely advocated as a life saving procedure in severe acute illness and injury associated with real or potential compromises to the patient's airway and ventilation

DEFINITION

Endotracheal intubation is the insertion of an endotracheal tube through the mouth or nose into the trachea beyond the vocal cords for e.g., establishment of an artificial airway, protection of the airway, provision of continuous ventilator assistance, facilitation of airway clearance and provision of an alternative route for administration of resuscitation medication.

EQUIPMENTS:

1. Suction canister with regulator and connecting tubing
2. Sterile 12 – 14 fr. Suction catheter or closed suction catheter
3. Sterile gloves
4. Normal saline
5. Yankuer
6. Intubation kit
7. Endotracheal attachment tape
8. Get order for initial ventilator settings
9. Sedation PRN

10. Stethescope

PREPARING FOR INTUBATION:

1. Recognize the need for intubation
2. Notify physicialn
3. Written consent to be obtained from patient's relative except in case of emergency.
4. Gather all necessary equipment
5. Suction canister with regulator and connecting tubing
6. Sterile 12 – 14 fr. Suction catheter or closed suction catheter
7. Sterile gloves
8. Normal saline
9. Yankuer
10. Intubation kit
11. Endotracheal attachment tape
12. Get order for initial ventilator settings
13. Sedation PRN
14. Stethescope
15. Call for chest x- ray to confirm position of ETT
16. Provide emotional support as needed/ensure family notified of change in condition

S.NO	NURSING ACTION	RATIONALE
1.	Explain the procedure if patient is conscious/patient's	To gain cooperation during

	relative	the procedure
2.	Ensure written consent is taken from the attender by the Doctor	For documentation purpose
3.	Keep the medication ready for sedation/ emergency drugs	Adequate sedation and muscle relaxation allows for a less traumatic intubation
4.	Keep the bains circuit and suction with yonker ready	For any emergency suctioning
5.	Position patient in supine with head extended by keeping sand bag or towel roll under neck	For easy view of the airway
6.	Check for loose teeth/dentures, if so remove with Magille's forceps	To avoid obstruction during the procedure
7.	Seal mouth and nose with mask and AMBU bag and continue bagging with oxygen.	To ensure a good fit and adequate opening of the airway
8.	Provide laryngoscope to physician (switched on)	To view the airway clearly
9.	Suction oral cavity	Suction allows the doctor to clear any secretions from the airway, while the laryngoscope will allow them to visualize the airway to pass the ET tube smoothly
10.	Provide lubricated endotracheal tube with stillete in situ	For easy insertion

11.	Press crico thyroid cartilage with thumb and index finger against esophagus.	This way it gives passage for the tube to enter inside the airway
12.	Assist while endotracheal tube is introduced into trachea. Remove stillete.	This allows easy access for the doctor performing the procedure
13.	Verify placement of the tube by auscultation, listening / feeling for airflow through tube and observe for bilateral cheat movements, and check for cuff leak.	To confirm the position of the tube
14.	Connect AMBU bag or Bain Circuit with oxygen to endotracheal tube and continue bagging.	To ensure adequate oxygenation till the tubing's are connected to the ventilator
15.	Inflate cuff of the endotracheal tube with 8 to 10 ml of air (20 – 30 cm of water)	To avoid dislodgement of the tube from situ
16.	Insert an oral airway or Bite Block and apply endotracheal suctioning if necessary.	To avoid tongue biting
17.	Fix endotracheal tube in position by cotton tape.	To avoid dislodgement of the tube
18.	Connect to ventilator	To supply airway for the patient

POST – PROCEDURE CARE

19.	Place patient in a semifowlers position.	To enhance lung expansion
20.	Arrange for a chest x-ray to be taken in order to check placement of ET tube	To make sure that the tube is in place
21.	Apply endotracheal suctioning if secretions are present.	To avoid pooling of secretion
22.	Watch for chest movements, ET tube kinking obstruction with secretion and blood, leakage of tube cuff, change in position of tube and over inflation of cuff.	To avoid any complication
23.	Document type and size of tube used, chest movements, vital signs and patients' tolerance to procedure	To monitor for any complication after the procedure

CARE OF PATIENT ON VENTILATOR

S.NO	NURSING ACTION	RATIONALE
1.	Assess the need for ventilator every day	Ventilator is a source of infection
2.	Always check the patient first. Observe the patient's facial expression, colour, respiratory effort, vital signs and ECG tracing.	Assessment will help in further nursing care
3.	Ensure the Endotracheal tube (ETT) or tracheostomy	To avoid device associated

	tube is held securely in position but not too tightly to result in pressure area lesions.	pressure ulcer
4.	Check and adjust (if necessary) the cuff pressure of the ETT/ Tracheostomy. In order to minimize tracheal damage, the cuff pressure should be between 20 – 30cms of water, to prevent an air leak.	Maintaining cuff pressure will help in placing the tube in place
5.	Yanker, suction catheters, suction apparatus & intubation kit should be available	Suctioning helps in removing the secretion
6.	Observe changes in respiratory rate and depth; observe for SOB and use of accessory muscles	To monitor for any respiratory distress
7.	Observe for tube misplacement (Note the Endotracheal tube lip level at the time of intubation and everyday)	To avoid self extubation
8.	Monitor the vital signs every hourly and if needed	To check the vital parameters
9.	Monitor chest x – rays, if needed	For confirmation of the placement
10.	Maintain ventilator settings as ordered	To provide adequate oxygenation to the patient
11.	Elevate head of bed > 30 – 45 degree except if contraindicated	To avoid micro aspiration
12.	Monitor ABG's	To make sure adequate oxygenation is given for the patient
13.	Observe for tube obstruction; suction PRN (closed	To avoid complication

	suction); ensure adequate humidification	
14.	Provide nutrition as ordered , eg TPN, Lipids or enteral feeding	To meet the patient nutritional needs
15.	Provide good oral care q4h with 0.2% chlorhexdine and sponge bath with chlohexidine 4%	To avoid transmission of infection from oral cavity via the ET tube to the lungs
16.	Ensure ventilator tubing / Bains circuit changed, if needed	To prevent infection
17.	Maintain ventilator bundle.	To ensure care and proper documentation