

**COMMUNITY PROTOCOL FOR  
CLEARING UPPER AIRWAY  
SECRETIONS USING SUCTION**

## **COMMUNITY PROTOCOL FOR CLEARING UPPER AIRWAY SECRETIONS USING SUCTION**

### **Introduction**

1. This procedure relates to the clearing of upper airway secretions using suction, by appropriately trained staff within the community.

### **Rationale**

1. Suctioning is a method used for removing upper airway secretions, which the patient themselves are unable to remove, due to airway obstruction, falling levels of consciousness or physical disability [1,2,3,4]

### **Principles**

1. There are several types of suction machines available, manufactured by different companies. Nurses/carers must be familiar with the suction machine and ancillaries available and know how to use them.
2. Nurses/carers caring for a patient who requires suctioning to clear their upper airway of secretions, must be able to recognise changes in the patient's condition which would indicate that suctioning is necessary to maintain a clear airway.

### **Authority to Proceed**

1. This procedure should only be undertaken by nurses/carers who have received training in the clearing of upper airway secretions using suction.
2. This procedure should only be carried out by staff who are competent and confident to perform the procedure.

### **Training/Skills**

1. Staff undertaking this procedure must have successfully completed a theoretical and practical training course in clearing upper airway secretions using suction.
2. Carers must feel competent and confident that their skills and knowledge are maintained. [1]
3. Carers' competencies should be assessed at least annually, more regularly if skills are not being used on a regular basis.
4. Nurses must feel confident and competent that their skills and knowledge are maintained within the Scope of Professional Practice. [5]

### **Special Factors**

1. Nurse/Carer must be able to recognise when a patient needs assistance to clear their upper airway of secretions.
2. Nurse/Carer must know the appropriate size of ancillary equipment which is needed for each individual patient.
3. The suction machine should be serviced annually.
4. The suction machine must be decontaminated between each patient [6]
5. The filter should be changed monthly if the suction machine is used frequently or sooner if the filter appears wet. [6]
6. Equipment should be cleaned, or disposed of, after use as directed by the manufacturer's instructions. [6]

## **PROCEDURE FOR CLEARING UPPER AIRWAY SECRETIONS USING SUCTION**

### **Equipment**

Suction machine  
Disposable liner (if needed)  
Connecting tubing (bubble tubing)  
Non-sterile disposable gloves  
Cooled, boiled water  
Yankauer sucker  
Suction catheters- sizes

- 8fg Infants and young children
- 10fg Large children and adolescents
- 12fg Adults

### **Prepare the Equipment**

1. Wash hands as per Walsall teaching Primary Care Trust Procedure.
2. Gather equipment needed.
3. Check the suction machine is working and is set at the correct pressure [6,7]
  - 80 - 150 mm Hg (8-12 kPa) Neonates / Babies
  - 150 - 200 mm Hg (12-15 kPa) Children
  - 200 - 250 mm Hg (15-18 /20 kPa) Adolescents
4. DO NOT exceed 250 mm Hg ( 20 kPa )

### **Prepare the Patient**

1. Make sure the patient is in a comfortable position
2. Explain the procedure to the patient.

### **Clear Airway of Secretions**

1. Cut bubble tubing to an appropriate length and use as connecting tubing, attach tubing to the suction machine.
2. Open packet containing Yankauer sucker or suction catheter packet at the coloured end.
3. Put glove on to dominant hand.
4. Attach Yankauer / catheter to connecting tubing using gloved hand.

5. Switch on suction machine.
6. Introduce Yankauer / catheter into the patient's mouth ensuring that NO suction pressure is on.
7. Apply suction pressure on exit by placing your thumb over the port & use continuous suction until Yankauer / catheter is clear of mouth. [4]
8. Once all secretions have been removed from the patient's mouth, remove the catheter from the connecting tubing using the gloved hand by rolling up the catheter into the glove & turning the glove inside out when taking off. Dispose of Yankauer / catheter after each use.
9. Clean the connecting tubing by sucking up water until the tubing is clean.
10. Suction should only be applied for about 10 seconds. Allow the patient to rest & repeat procedure if secretions still present. [4]

### **Care of Equipment**

1. Dispose of used Yankauer / suction catheters & gloves according to Unit policy for clinical waste.
2. Clean the connecting tubing by sucking up water until the tubing is clean. [1]
3. Wash the connecting tubing in hot, soapy water, rinse & shake out excess water.
4. Connect back up to the suction machine, switch machine on & hold thumb over the end. This will suck any excess water out of the tube.
5. Replace Yankauer / suction catheters & gloves.
6. When the collection bottle on suction machine is  $\frac{3}{4}$  full, then remove the disposable liner from the bottle & dispose of it according to Unit policy for clinical waste. [6]
7. If the collection bottle is not  $\frac{3}{4}$  full but has been used then change the disposable liner weekly.
8. If the suction machine has a reusable collection bottle, empty the contents in the toilet & wash the collection bottle with hot, soapy water, rinse & dry & reassemble the suction machine. [6]
9. Keep the suction unit clean by wiping with a damp cloth.
10. The connecting tubing must be washed after each episode of suctioning & replaced every 24-hours.

11. Ensure the suction machine is left on continuous charge when not in use. [6]
12. The filter on the suction machine needs to be changed once a month if the suction machine is being used regularly, or more frequently if the filter appears wet or discoloured. [6]

### **Documentation**

1. Record in the patient's records the amount, consistency & colour of secretions removed, e.g. small, moderate or large amount. Thin, frothy or thick consistency. Clear, white, cream, yellow or green colour. [4]

## **References**

### **Clearing Upper Airway Secretions Using Suction**

1. American Association for Respiratory Care (1999) AARC Clinical practice guideline: suctioning of the patient in the home. *Respiratory Care*. 44: 1, 99-104
2. Law C (2003) Recognition, prevention and management of sputum retention. *Nursing Times*. 99: 23
3. Law C (2003) Using mucociliary clearance methods that do not require an artificial airway. *Nursing Times*. 99: 41
4. Moore T (2003) Suctioning techniques for the removal of respiratory secretions. *Nursing Standard*. 18: 9, 47-53
5. UKCC (1992) *Scope of Professional Practice*.
6. Laerdal Medical Ltd (1999) *Manufacturers instructions for using the Laerdal suction unit*
7. Murray W (2001) How to use medical devices safely. *Nursing Times*. 97: 43

**TROUBLE SHOOTING FOR CLEARING UPPER AIRWAY SECRETIONS  
USING SUCTION**

<b>Problem</b>	<b>Action</b>
Unable to clear secretions	<p>Position patient in an upright position.</p> <p>Carry out procedure for clearing upper airway secretions again until airway is clear.</p>
Suction machine is not working	<p>Check that the power supply cable is properly fitted and switched on at the mains electricity supply.</p> <p>Check whether the battery is fully charged, plug into the mains electricity supply.</p> <p>If suction machine is still not working then use spare suction machine and inform the District Nurse or Community Children's Nurse.</p>
Secretions are not being removed effectively	<p>Check the suction machine is set at the correct pressure.</p> <p>Check the bottle and lid is assembled correctly.</p> <p>Check that the collection bottle is not full and empty if it is full.</p> <p>If you are using a reusable canister, check the filter. If it is wet or discoloured then the filter will need changing.</p> <p>Check that the tubing is not kinked.</p> <p>If suction machine appears to be broken then use spare suction machine and inform the District Nurse or the Community Children's Nurse.</p>