HEALTH HOLDING

HAFER ALBATIN HEALTH CLUSTER
MATERNITY AND CHILDREN HOSPITAL

Department:	Pediatric Intensive Care Unit (PICU)		
Document:	Multidisciplinary Policy and Procedure		
Title:	Care of Pediatric Patient with Tracheostomy		
Applies To:	All Pediatric Intensive Care Unit Staff		
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1. PURPOSE:

1.1 To prevent accumulation of secretion that can interfere with respiration and ensure airway patency by keeping the tube free of mucus build up.
1.2 To reduce risk of infection and prevent breakdown of surrounding skin.
1.3 To prevent displacement or dislodgement of the tracheostomy tube.
1.4 To establish safe environment for the patient with tracheostomy.

2. DEFINITONS:

2.1 **Tracheostomy Tube** – is the indwelling tube inserted into the trachea which is usually inserted in the operating room. The tube is made of semi-flexible rigid plastic or metal and is available in different sizes with different angles selection of which by the physician will depend on the condition of the patient.
2.2 **Tracheostomy Care** – is the management rendered to patient with an opening in the anterior wall of the trachea inferior to the cricoid cartilage made surgically to provide tracheal access for airway management via a temporary or permanent tracheostomy tube. The airway is kept open, humidity is provided and wound is kept sterile.

3. POLICY:

3.1 Tracheostomy care must be performed by the nurse who is knowledgeable of the indications, type of tracheostomy tube and tracheostomy care management as well as skilful in performing the procedure. The nurse should assess the patient with tracheostomy frequently.
3.2 Tracheostomy dressing should be changed every 8 hours and as needed under sterile technique.
3.3 Tracheostomy tie should be changed when it is dirty or loose and routinely at least once a week. The staff nurse should take care of the stay sutures post operatively.
3.4 A sterile tracheostomy tube of same size size and smaller of the patient shall be readily available at bedside.
3.5 Resuscitation equipment and supplies shall be available for emergency use.
3.6 Changing of a single cannula tracheostomy tube or the outer cannula of a double cannula tube should be done by the physician and assisted by nurses. The recommended minimum time before the first tube change is 5-7days following surgical tracheostomy
3.7 Each patient who has a tracheostomy should have a tracheostomy sign displayed above their bed. All information required regarding the patient's tracheostomy are recorded.
3.8 Post Op Care Sedation: for post op care, usually 3 to 5 days, from deep Sedation to +/- paralysis, for the stoma to mature.
Bedside equipment: It is the responsibility of the nurse assigned to the patient's care to ensure at the beginning of each shift that the equipment they need is readily accessible i.e. assembled at the bedside and functional. The equipment should include ,Spare Tracheostomy tubes (Same size and smaller)Tracheal Dilators, syringes, Tracheostomy Tapes (Cotton and Velcro), stitch ,scissors, KY Gel, Suction machine fitted with filter, Suction tubing, Suction Catheters

3.9 Post procedure check Check that the tape tension is correct and able to support the tracheostomy tube. Observe any neck swelling (surgical emphysema). Inspect the chest for bilateral chest movement. Auscultate the chest for equal air entry (pneumothorax/tube position).
A portable post-operative chest x-ray must be performed within one hour or so to confirm tube position and to rule out pneumothorax or surgical emphysema

4. PROCEDURE:

4.1 Check the Physician's order.
4.2 Identify the patient using two identifiers (Patient's 4 names for the Saudi/ complete name for the Non – Saudi and Medical Record Number).
4.3 Explain the procedure to the parents or family.
4.4 Assess the condition of the stoma before tracheostomy care (redness, swelling, character of secretions, and presence of purulence or bleeding). Indicates air leak into the subcutaneous tissue.
4.5 Examine the neck for subcutaneous emphysema.
4.6 Suction the trachea and pharynx thoroughly before tracheostomy care. Removal of secretions keeps the area clean longer.
4.7 Prepare the equipment maintaining sterility.
4.8 Wash hands.
4.9 Place sterile towel on patient's chest under tracheostomy site.
4.10 Put on mask and wear sterile gloves.
4.11 Clean the external end of tracheostomy tube with gauze soaked with sterile 0.9% normal saline as ordered by the physician and discard.
4.12 Clean the stoma area with sterile 0.9% normal saline – soaked gauze as ordered using a single sweep with each gauze before discarding.
4.13 Loosen and remove crust with sterile cotton swab.
4.14 Clean with sterile water – soaked gauze. Apply gauze soaked with antiseptic solution to fresh stoma or infected stoma.
4.15 Then clean with dry sterile gauze.
4.16 Change a disposable inner cannula or wash the reusable inner cannula.
- 4.16.1 For disposable inner cannula, touch only the external portion and lock it securely into place.
- 4.16.2 For reusable inner cannula, remove it with your contaminated hand and clean it with sterile 0.9% normal saline, using brush or pipe cleaners with your sterile hand. After cleaning, drop it into the sterile saline solution and wash it to rinse thoroughly with your sterile hand. Tap it gently to dry and replace it with your sterile hand.

4.17 Change the tracheostomy tie if soiled with a new tie on each side and secure them with a double knot at the side of the neck enough to keep the tube securely and to permit two fingers to fit between the tapes and the neck.
4.18 More frequent suctioning may be required in the immediate post-operative period
The appropriate size of the catheter should be used. Suction not more than 10 seconds
As a guide, practitioners should double the size of the tracheostomy tube to obtain the appropriate suction catheter Size, e.g. Size 4.0 tracheostomy tube = size 8f catheter. A suction catheter diameter should be less than half of the size of the tracheostomy tube to reduce potential for hypoxia and allow the child to breathe during the procedure. Suction pressures should be kept to a minimum; as a general guide pressures should not exceed 60-80mmHg (8-10kPa) for neonates/ small infants and up to 120mmHg
4.19 While using cuffed tracheostomy tubes Cuff pressure should be maintained between 15 and 25 cm H2O unless directed otherwise. Synchronized cuff deflation technique is used to prevent aspiration of secretions that may have collected above an inflated tracheostomy cuff. The technique requires 2 personnel. As one person deflates the cuff, a second person performs tracheal suction. The timing is crucial to prevent hypoxia (suction taking more than 10 seconds) and aspiration of secretions (cuff deflated too early, prior to suction.
4.20 Wash hands.
4.21 Documentation:

4.21.1 The tracheostomy care given.
4.21.2 Dressing changed, amount and color of drainage.
4.21.3 Amount, consistency, color of secretions suctioned.
4.21.4 Condition of the skin.

4.22 Nursing Consideration:
4.22.1 Observe the skin/sites for any signs of infections.
4.22.2 Tracheostomy tie should be change at least once per week and whenever it is soiled or wet.
4.22.3 Call the physician at once if the tube becomes dislodge. Never reinsert it blindly.
4.22.4 Humidification and prevention of crustation by.
4.22.4.1 Constant room temperature.
4.22.4.2 Continuous controlled humidification.
4.22.4.3 Softening of the viscid secretions by installation of 2 ml of Normal Saline/ Ringer Lactate through the tracheostomy tube followed by suction.
4.22.4.4 Avoid crustation by using mucolytic agent.
4.22.4.4.1 Stoma care is change 1 -2 times a day or whenever needed.

5. MATERIALS AND EQUIPMENT:

5.1 Tracheostomy Tube (according to sizes)
5.2 Sterile Gauze Soaked with Antiseptic Solution
5.3 Sterile Gauze Soaked with Hydrogen Peroxide
5.4 Dry Sterile Gauze
5.5 Sterile Gauze Soaked with Sterile Water
5.6 Sterile Gloves
5.7 Sterile Cottons Swab
5.8 sterile 0.9% normal saline/ hydrogen peroxide solution
5.9 Tracheal Dilator
5.10 Suction Bottle and Tube Connected to Suction Source
5.11 Sterile Water/Normal Saline
5.12 Ambubag and Mask connected to Oxygen Source
5.13 Antiseptic Solution and Ointment
5.14 Tracheostomy Tie
5.15 Sterile Towel
5.16 2 Sterile Container
5.17 Sterile Tray
5.18 Face Mask

6. RESPONSIBILITIES:

6.1 Physician
6.2 Nurses
6.3 Respiratory Therapist

7. APPENDICES:

7.1 Physician's Order Sheet
7.2 Nurses Progress Notes

8. REFERENCES:

8.1 Lippincott Manual of Nursing Practice 7th Edition, Pages 218 – 220.
8.2 Tracheostomy Care Protoccol.
8.3 Directorate of Health Affairs Holy Capital, Maternity and Children Hospital, 1438.

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KINGDOM OF SAUDI ARABIA

وزارة الصحة
Ministry of Health

Hospital: _____ مستشفى:

Region: _____ المنطقة/المحافظة:

Dept./Unit: _____ القسم/الوحدة:

MRN: | | | | | | | | | | رقم الملف الطبي:

Name: _____ الاسم:

Nationality: _____ الجنسية:

Age: _____ ☐ سنة Years ☐ شهر Months ☐ يوم Days العمر:

Date of Birth: ___/___/14___ H ___/___/20___ تاريخ الميلاد:

Gender: ☐ Male ☐ Female الجنس:

NURSES PROGRESS NOTES FORM

DATE &TIME	NURSES NOTES (D-data A-action R-response)	REGISTERED NURSE INITIAL WITH ID NUMBER

Note: Write the time in each entry & affix your initial at the end of each paragraph. Document your complete Name, Initial, Job number, Date & Time at the closure of your documentation. Draw a line across empty spaces.

Name: _____ :الاسم	MRN: | | | | | | | | | | رقم الملف الطبي:

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