PAEDIATRIC NURSING PRACTICE MANUAL
SECTION 7

CARE OF THE CHILD WITH A RESPIRATORY CONDITION

7.4 CARE OF THE CHILD WITH A TRACHEOSTOMY

7.4.2 CARE OF THE TRACHEAL STOMA

Aims

1. To ensure the stoma is clean and dry, to minimise infection and irritation.[1]
2. To promote healing.[2]
3. To maintain a patent airway by reducing the formation of granulation tissue.[2]

Key points

1. The nurse caring for a child with a tracheostomy tube must be able to demonstrate a sound knowledge and skill level in respiratory assessment and tracheostomy care before accepting responsibility for care.[3, 4, 5]
2. Frequency of stoma care should be assessed on an individualised basis.[6,7] It should be attended at least daily[8-10], but may be required more frequently postoperatively, if infection is present or if indicated by redness, ooze or bleeding.[2,7,11]
3. An *aseptic non touch technique* using sterile equipment is only required until tracheostoma formation, usually one week following insertion.[12] Once the stoma is healed post operatively the stoma can be managed with non sterile equipment i.e. non sterile gauze, cotton tips, cloth, tap water.
4. This procedure is combined with changing of the tapes to facilitate access under the neck plate.[8]
5. Dressings are *not* routinely used, but may be used when clinically indicated eg.[3, 6, 7]:
    - Irritation/inflammation/tenderness around the stoma or under the neck plate (for protection), often required for 1-2 weeks following tracheostomy insertion [6]
    - For excessive exudate or secretions [6] Refer to PNPM 9.1.1 for dressing selection
6. Where a specific stoma infection is diagnosed, appropriate treatment will be prescribed by the medical officer.
7. Granulation, a fragile highly vascular tissue, may occur around the stoma or inside the trachea. If there is granulation around the stoma this can cause bleeding or begin to impinge on the stomal opening. Treatment may be required [2] (as prescribed by a medical officer). Preventing rubbing and infection is vital to prevent granulation occurring.[2] Options include:
    - Utilising dressings to prevent or reduce rubbing and absorb exudate.
    - Kenacomb ointment applied *sparingly,* usually twice daily for 7-10 days
    - Silver nitrate caustic sticks applied as required to manage granulation.

All protocols should be read in conjunction with the Disclaimer in the Preface of this manual
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Equipment

Towel and washcloth
Clean cotton-tipped applicators
Soap and water
Dressing:

- a antimicrobial non woven dressing eg. Excilon AMD® Antimicrobial IV Sponge[13]
- a foam eg. Allevyn fenestrated dressing, Mepilex Lite® (okay to cut this dressing)

Additional equipment which may be required:

Sodium chloride 0.9%
Dressing pack and sterile cotton-tipped applicators
Prescribed topical medication

PROCEDURE	ADDITIONAL INFORMATION
Position child comfortably with the neck extended, in either a sitting or lying position.	Suctioning the child prior to the procedure may reduce the need to cough or perform suction during the care. A towel roll placed behind the shoulders may assist in maintaining the correct position when the child is lying down.
If the tapes are loosened or removed, an assistant *must* be solely responsible for maintaining the correct position of the tracheostomy tube.[1,3]	To prevent decannulation.
Aseptic technique using sterile equipment: until stoma healed: [12] Perform hand hygiene; gather sterile gauze and/or cotton tipped applicators. Open a dressing pack and add additional equipment and 0.9% sodium chloride for cleaning. Repeat hand hygiene and don sterile gloves. Start at the stomal edge and wipe or roll the applicator outward from the stoma to ensure that no dried secretions, liquid or foreign bodies enter the stoma. Dry the area around the stoma.	Refer to ANTT guideline for wound care (uncomplicated). Clean a dressing trolley with 70% alcohol or sporacidal detergent and allow to dry.
Standard Aseptic non touch technique:[11] Perform hand hygiene and prepare a clean surface. Apply non sterile gloves. Using non-sterile cotton tipped applicators and a soft cloth, clean the stoma area gently with water.[2,8] Work from clean areas to dirty as above. Remove all loose crusts.[13] Dry thoroughly.[13]	

PROCEDURE	ADDITIONAL INFORMATION
Note appearance of stoma and surrounding area.[3]	Observe for rubbing, redness, ooze, bleeding, granulation tissue or skin breakdown.[2]
Apply topical preparations as ordered.[2]	Kenacomb ointment is applied as a *very thin layer* to stoma area.
Apply a dressing if required eg.[3,6] Precut antimicrobial dressing for infection or to prevent/reduce rubbing. Foam for exudate. Mepilex Lite for broken skin or light exudate.	Dressings must be non fraying if cut and non fluffy (Do Not Cut Gauze).[1,6,7] The type of dressing used will depend on the clinical indication refer 9.1.1. Skin inflammation/excoriation may result from irritation from the flange, tapes or ties.[1] Using forceps may assist in positioning the dressing.
Dispose of used equipment in clinical waste. Decontaminate trolley or surface with sporacidal wipe. Perform hand hygiene.	
Document procedure and condition of stoma.[3]	Complete a wound care plan as indicated.

References:

1. Edgtton-Winn M, Wright K. Clinical update, tracheostomy: A guide to nursing care. [Expert Opinion]. Aust Nurs J.13(5):88-91; 2005.
2. Fiske E. Effective strategies to prepare infants and families for home tracheostomy care [Expert opinion]. Advances in Neonatal Care.4(1):42-53; 2004.
3. Joanna Briggs Institute. Tracheostomy: Dressing. [Expert Opinion]. In: Acute Care Manual. Adelaide: Joanna Briggs Institute; 2007.
4. Wilson M. Tracheostomy management. [Expert opinion]. Paediatric Nursing.17(3):38-44; 2005.
5. Moore T. Suctioning techniques for the removal of respiratory secretions [Expert opinion]. Nurs Standard.18(9):47-55; 2003.
6. Barnett M. Tracheostomy management and care. [Expert opinion]. J Community Nursing [JCN].19(1):4-8; 2005.
7. Nursing and Midwifery Practice Development Unit (NHS Quality Improvement Scotland). Best practice statement - Caring for the patient with a tracheostomy [Expert Opinion]. 2003. Available from: http://www.nhshealthquality.org/nhsqis/files/tracheostomy.pdf. Accessed:
8. Chitakis M. Personal Communication [Expert Opinion] Brisbane. Royal Children's Hospital.; July 2012.
9. Nadew K. Personal Communication [Expert Opinion] Sydney. Sydney Children's Hospital.; July 2012.
10. O'Neill M. Personal Communication [Expert Opinion] Brisbane. Mater Hospital.; July 2012.
11. Serra A. Tracheostomy care [Expert opinion]. Nurs Standard.14(42):45-55; 2000.
12. Vijayasekaran S. Emergency resuscitation of a patient with a tracheostomy [Expert opinion]. In: Party TW, editor. Medical Officer, Otolaryngology Department, Paediatric ENT Services. Princess Margaret Hospital for Children. Perth, WA; n.d.
13. Motta GJ, Trigilia D. The effect of an antimicrobial drain sponge dressing on specific bacterial isolates at tracheostomy sites. Ostomy Wound Management. [Level III-1].51(1):60-66; 2005.