

**ALTERED AIRWAYS CARE FOR REGISTERED
HEALTHCARE PROFESSIONALS**

A SELF LEARNING PACKAGE

THEORY AND PRACTICAL ASSESSMENTS

AIMS AND OBJECTIVES

Aims

- To educate and train healthcare professionals to perform Altered Airway (AA) care safely and competently
- The skill will be in accordance with local Trust procedures, with underpinning theoretical knowledge to ensure evidence based practice

Objectives

- For all healthcare professionals (HCPs) to be aware of and adhere to WAHT AA Guidelines available on Trust intranet Key documents page:
 - Management of patients with tracheostomy tubes
 - Care Pathway for all Patients with a Tracheostomy
 - Adult Tracheostomy Teaching Booklet
 - Adult Mini Tracheostomy Teaching Booklet
 - Management of Patients with a Laryngectomy
 - Care Pathway for all Patients Following Laryngectomy
 - Laryngectomy Teaching Booklet
 - Adult Patients Going Home with an Altered Airway - Guidelines for the care and training required for carer/patient prior to Discharge from Hospital
 - Altered Airway Discharge Pathway

Training

- Theoretical knowledge will be obtained and demonstrated using a self directed study method National Tracheostomy Safety Project (NTSP) modules on ESR
- Practical training provided via WAHT AA course and in the clinical area.

Assessments

- Each HCP will take responsibility for acknowledging their own level of competence and exercise their professional clinical judgement before undertaking this procedure unsupervised, highlighting any training needs at annual PDR via self-assessment tool with line manager.
- Self-directed theoretical study and NTSP modules on ESR must be completed prior to starting supervised practice (Please print off certificates in ESR)
- It may not be deemed suitable for you to undertake all parts of the theory or practical assessments.

Assessors

To be deemed competent in Tracheostomy management you must be assessed by one of the following members of staff:

- Head & Neck Clinical Nurse Specialist.
- Band 6 &7 Head and Neck ward Nurses.
- Senior Head and Neck / Respiratory Physiotherapist

LEARNING OUTCOMES

On completion of the theory assessment for tracheostomy care training you will be able to:

- Demonstrate knowledge of national, local and professional policies, procedures and standards in relation to Altered Airway (AA) care
- Demonstrate knowledge of the normal anatomy of the neck
- Demonstrate knowledge and skills of AA management.
- Demonstrate knowledge of equipment used in AA care and be aware of the associated risks and benefits
- Demonstrate an awareness of the psychological problems patients may experience having a AA

- Demonstrate knowledge of how to identify the resources available for information and practical advice:
 - Health and safety policies/ Infection control policies
 - Tracheostomy/Laryngectomy/PMSV/Oxygen Therapy guidelines
 - Pharmacy
 - Physiotherapy oncall booklet
 - CHEC library
 - Head and Neck CNS
 - Respiratory Physiotherapists
 - Resuscitation Officers
 - ITU nurses/outreach team
 - Respiratory Nurse Specialist
 - Head and Neck ward

USEFUL REFERENCES

National Tracheostomy safety project (NTSP)

Resources & online training

<http://www.tracheostomy.org.uk/>

NCEPOD review – ‘On the Right Trache’ 2014

<https://www.ncepod.org.uk/2014tc.html>

SHINE project: Global Tracheostomy Project

www.globaltrach.org

St Georges University Hospital's Tracheostomy Guideines

<https://www.stgeorges.nhs.uk/gps-and-clinicians/clinical-resources/tracheostomy-guidelines>

WAHT ALTERED AIRWAYS ASSESSMENT

This self directed assessment is designed to be completed alongside the NTSP modules on ESR.

Name:.....

Designation:.....

Area of work:.....

NTSP MODULE	Date Completed
Basic Knowledge about Tracheostomies & laryngectomies	
Emergency Management of a tracheostomy or laryngectomy	
Nursing care of a tracheostomy or laryngectomy	
WAHT AA Theory assessment	
WHAT AA Practical assessment	

Candidate signature.....

Final Assessors Name.....

Designation.....

Assessors signature.....

ALTERED AIRWAY THEORY ASSESSMENT

1. What is the difference between a Tracheostomy or Laryngectomy?
2. When by-passing the upper airway with a tracheostomy, what normal anatomical structures and their functions are absent?
3. Give 4 reasons for tracheostomy?
4. What is the main reason for performing a Laryngectomy?
5. Where is the most common surgical site for tracheostomy?
6. Name the different types (Not brand) of Tracheostomy tubes that are available at WAHT
7. What are the two main purposes of a subglottic suction port on a tracheostomy tube?

8. What is essential to have in the Bed space of an AA patient?

9. What are the most common incidents reported regarding management of an AA?

10. What is the purpose of a cuff on a tracheostomy tube and why would it be inflated?

11. What is the recommended cuff pressure and how often would you check it?

12. When would cuff deflation be considered?

13. What are the advantages of an inner cannula and how often would you change/check it?

14. How is a tracheostomy normally secured in place?

15. What stoma care will you perform, how often and why?

16. Explain why humidification is an essential part of AA care?

17. Explain the difference between active and passive humidification and give an example of each?

18. Why might you decide that a patient requires suction?

19. What is sometimes required to be administered to a patient prior to suctioning?

20. State the recommended suction pressure for adults.

21. How long is it acceptable to maintain suction?

22. What are the risks and potential complications of suctioning?

23. What methods or equipment can you use to help your patient communicate his/her anxieties and understanding?

24. When would you consider commencing weaning of a tracheostomy patient?

25. When is it appropriate to use a speaking valve and what safety considerations do you need to address prior to commencing?

26. What are the considerations prior to making the decision that your patient is fit for decannulation of their tracheostomy?

27. Which HCP would you expect to see in an AA MDT?

EMERGENCY PROCEDURES

****NB.ALL OF THE BELOW ACTIONS SHOULD WITH CARRIED OUT
WITHIN YOUR SCOPE OF PRACTICE AND DISCUSSED WITH
YOUR MENTOR ****

1. List the five categories of AA red flags, and give an example of each.

2. Where would you find the emergency algorithm for tracheostomy/laryngectomy patients?

3. What essential equipment would you expect to find in the bedside emergency box?

4. As a HCP looking after a patient with an altered airway what steps can you take to ensure the resus team has all the information/equipment available when they arrive?

5. Label the following emergency Tracheostomy management steps in order that they would be performed (1-6)
 - Can you pass suction a suction catheter
 - Remove the Tracheostomy tube
 - Remove the speaking valve (if present) and inner cannula
 - Is the patient breathing
 - Deflate the cuff (if present)
 - Apply oxygen to both face and stoma

The following questions 4-8 are multiple choice: please circle either a, b, c or d:

6. A Patient has a mini-trachea insitu for regular bronchial suctioning. You discover him collapsed but groaning. He is tachypnoeic and his oxygen saturation monitor is alarming that there is a 'poor signal'. What would you do?
- a) Call 2222 and commence CPR.
 - b) Call for urgent help, open the airway with head tilt / chin lift and deliver high flow oxygen via their mouth using a non-rebreathe face mask
 - c) Call for urgent help and deliver high flow oxygen via the mini-trachea.
 - d) Suction first, then re-assess
7. A patient with a cuffed tracheostomy is showing signs of respiratory distress what would your course of action be if you suspected a blocked tube?
- a) Reassure the patient, suction the patient and change the inner tube then wait for them to improve
 - b) Reassure the patient, call for assistance, increase/administer oxygen via trache, attempt suction to clear the blockage, remove the inner tube, deflate the cuff, call for urgent help (2222), administer oxygen via mouth/nose if airway patent, remove tracheostomy and insert tracheal dilators to maintain the airway until resus team present or if appropriately trained insert a new tracheostomy tube the same size or 1 size smaller.
 - c) Reassure the patient, call for assistance, increase/administer oxygen via trache, attempt suction to clear the blockage, remove the inner tube, call for urgent help (2222), administer oxygen via mouth/nose if airway patent, remove tracheostomy and insert tracheal dilators to maintain the airway until resus team present or if appropriately trained insert a new tracheostomy tube the same size or 1 size smaller.
 - d) Call the resus team
8. A patient with a laryngectomy has sustained a cardiac arrest. The doctor is providing bag/valve/mask ventilation via a face mask and asks you to occlude the tracheostomy as he thinks air will leak out. Why is this wrong?
- a) Ventilation is only possible via the tracheostomy –the patient no longer has a patent airway from his mouth/nose to his lungs. The Doctor must connect the ventilation bag directly to the tracheostomy tube via the 15/22mm connector
 - b) A bag/valve/mask device will not work under these circumstances – a 'waters' breathing circuit must be connected

- c) Ventilation can now only be achieved by oro-tracheal intubation. This should be the first priority
 - d) The tracheostomy must be left 'open ' to allow expiration
9. A patient with a tracheostomy is having an anaphylactic reaction. You need to give him oxygen urgently however his face and neck are swelling. What is the best way to give him oxygen?
- a) Via face mask only
 - b) Via tracheostomy only
 - c) Via both facemask and tracheostomy
 - d) The swelling will obstruct his airway in moments – he needs immediate intubation
10. A patient with a tracheostomy has had a cardiac arrest. You are managing his airway while a colleague performs chest compressions. How will you provide rescue breathing?
- a) Ventilation via a bag/valve/mask applied to the mouth & nose if there is no cuff/cuff is down
 - b) Ventilation via a bag/valve/mask device attached directly to the tracheostomy if the cuff is up
 - c) Attempt to ventilate via the mouth and nose – if unsuccessful, use the tracheostomy
 - d) All of the above
11. A patient with a laryngectomy has stopped breathing and needs immediate rescue breaths. There is no tube in-situ – he has an open stoma. How will you provide ventilation?
- a) Occlude the stoma and ventilate via the mouth & nose using a bag/valve/mask
 - b) Give mouth-to-stoma rescue breaths
 - c) You cannot ventilate him – he needs an anaesthetist to re-insert a tracheostomy tube urgently
 - d) Use a bag/valve/mask attached to a circular paediatric facemask sealed onto the stoma