



NIV & Tracheostomies - Dispelling the Myths & Putting the Person First

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Complex Ventilation



WHAT IS THE RIGHT MASK



Masks

- What is right for you?
 - Nasal Mask
 - Nasal Pillows
 - Full-face mask
- Comfortable
- Enable speech and eating
- Not cause pressure sores
- Not leak



Masks



Is there an alternative interface for daytime ventilation needs?



Mouthpiece Ventilation (MPV)

- When?
 - Can be started if you find you are needing to use NIV in the day
 - If you notice increased breathlessness in the afternoons
 - Decreased audibility of speech
- Settings:
 - Aim is for a hyper insufflation
 - > 1L volume
 - No PEEP
 - No BPM
 - Long Ti
 - Kiss trigger



Current Problem

- Royal College of nursing (RCN) 2018 paper
- Community care for children and young adults
 - Statement: Only registered nurses can carry out ANY SUCTION
- No stakeholder discussion prior to publication
- Care packages will need to be increased to include RN
- Impact is HUGE



TRACHEOSTOMY TALES



Back in time...

- Tracheostomy derived from 2 Greek words meaning “I cut the trachea”
- Reference to the procedure existed in the Rig Vedas – the sacred book of Hindu medicine: 2nd millennium BC
- 1st successful tracheostomy recorded 1546 by an Italian physician
- 1800’s performed on children with diphtheria
- Chevalier Jackson refined the technique in 1909



The children's diphtheria ward



Going forward...

- Last 60 years 3 major developments:
 - IPPV and ICU (due to polio epidemic)
 - Low pressure tracheostomy cuffs
 - Percutaneous dilatational technique (1969)
- Creative and imaginative people!



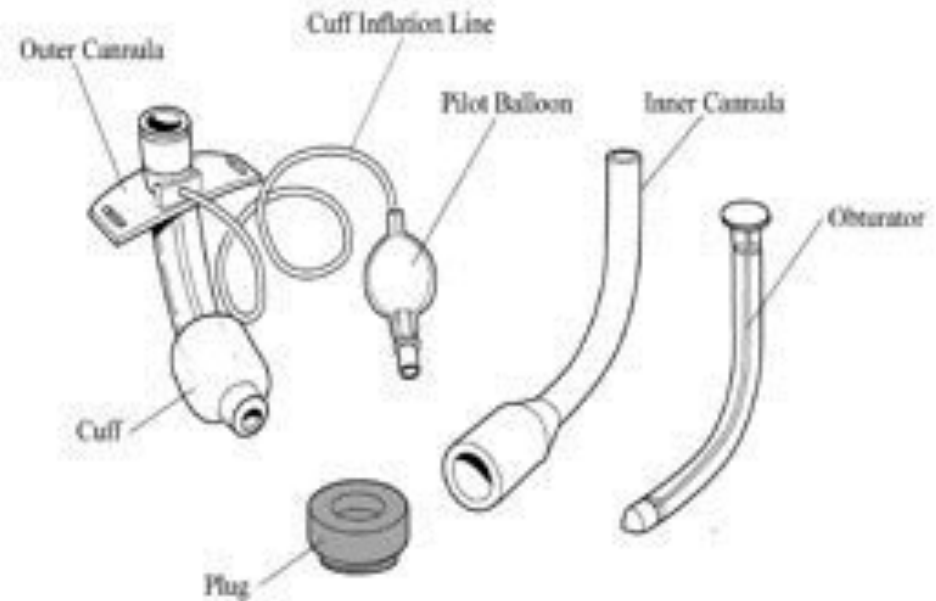
Reasons for a Tracheostomy Tube

- Long term invasive mechanical ventilation
- Tracheal obstruction
 - Upper airway – stenosis, abnormal vocal folds
 - Tracheomalacia
- Copious, unmanageable secretions OR unable to clear secretions effectively despite adjuncts



Types of Tracheostomy Tubes

- Cuffed
- Uncuffed
- Double lumen
- Single lumen
- Fenestrated
- Unfenestrated
- PVC, PU, Silicone, Silver
- Subglottic port
- Differing lengths and curvature



Upper Airway - physiological

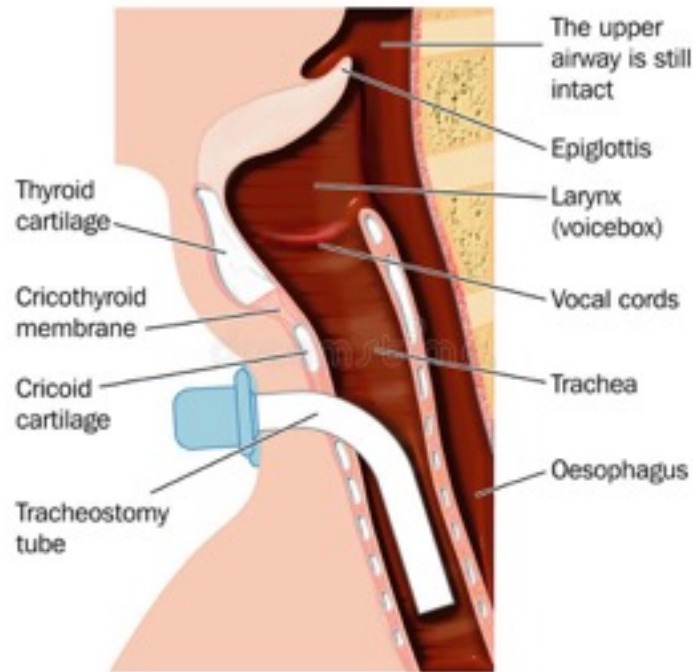
NEED NORMAL AIRFLOW

- 1st line of defence
- Humidification & warming
- Taste and smell
- Swallow
- Phonation
- Cough
- Subglottic pressure



Physiological Changes

- All physiological functions are impaired
 - Increase risk of infection



Psychological changes

- Altered body image
 - Self
 - society
- Lack of communication
- Reduced cognitive / sensory development
- Feelings of vulnerability
- Reduced lifestyle
- Medicalised

The Myths

- Cuffs stop aspiration
- ‘you won’t be able to eat or drink’
- ‘you will never be able to talk again’
- ‘you won’t be able to have a bath or shower’
- ‘you won’t be able to go home’
- ‘The tube will never come out.’



Having a Trache and reducing the risks

- The right tube for the job!
 - Model & material
 - Size & length
 - Curvature
- Meticulous planning for discharge
 - Education (it is **NOT critical care**)
 - Training
 - Optimal weaning or on going weaning at home
 - Equipment



Essential Equipment

- Emergency box
 - Spare TT
 - TT licence
- Consumables
- Suction machine x 2 (with battery)
- Ventilators x 2 (if ventilated)
 - Carry bags
 - Spare batteries
- Humidification
- Bag valve mask (resuscitation bag)



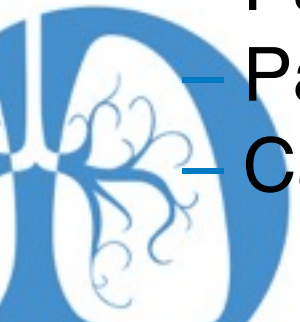
Having a Trache

- Holistic collaborative and integrated management
 - Where the tube will be changed and who by
 - Access to local ENT
 - Trache passport – red flags
 - Who to contact and what support
 - Management plan
 - Emergency and escalation plans
 - Psychological input
 - Working within the person and family's lifestyle



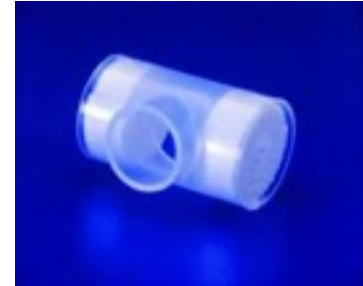
Current Problem

- Royal College of Nursing (RCN) 2018
- Health needs for in community – children and young adults
 - All suctioning has to be carried out by registered nurses!
- No involvement with actual stakeholders
 - Nurses
 - Physio
 - Parents
 - Patients
 - Carers



Having a Trache

- Effective humidification
 - Buchanan bib / HME
 - Effective hydration
 - Fisher & Paykall humidifier (active)
 - Nebulisers
- Speaking valves
 - Upper airway restoration valves
- Effective chest clearance
 - Suctioning
 - Other adjuncts



Why Can't I Speak With a Speaking Valve?



Possible Causes

- Trache tube too big
- If cuffed tube – cuff not deflated
- Anatomical obstruction / dysfunction
 - Vocal cords
 - granulation
- Unable to open diaphragm in valve
 - Try different valve

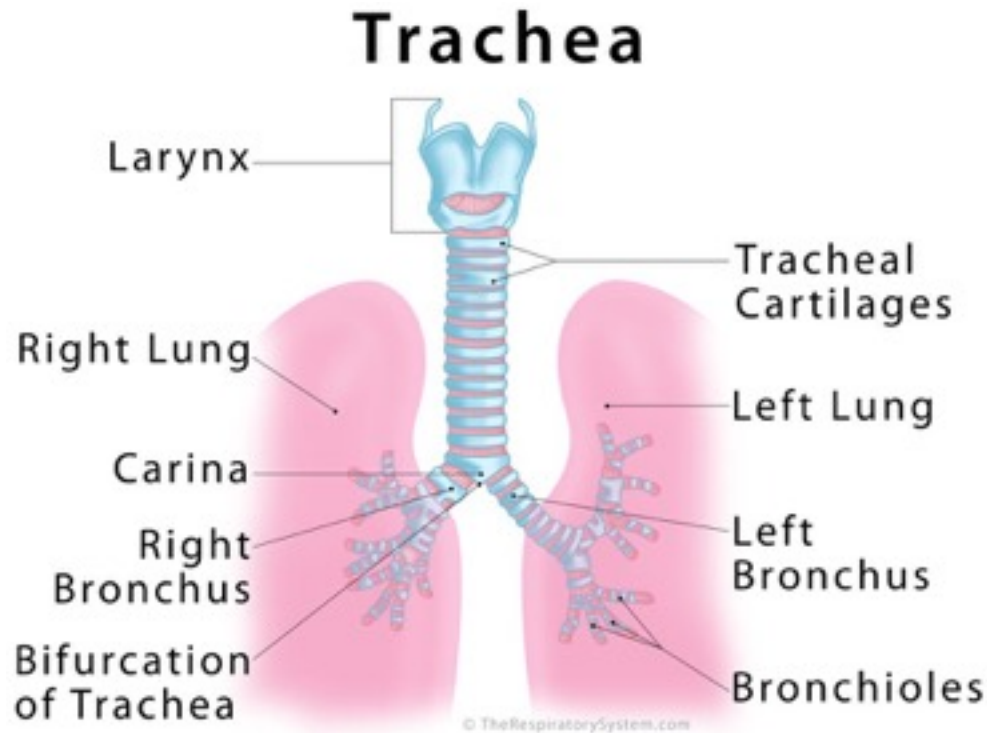


What Is Deep Suction And When Should It Be Taught?



Deep Suction

- To clear chest secretions effectively
- Suction catheter goes down to the carina



Deep Suction

- Should be taught to all those caring for a person with a trache
- Should start at the hospital prior to discharge
- Clean technique
- Adapted for each individual person
- Use number graded suction catheters



Trache Tube Changes

- All those caring for the person should be able to change the trache tube
- Preferably at **HOME**
 - normalise
 - Clean technique
- It is part of their being



Enabling....

- Risk take with back up plans
- Home
- Patient and carer narratives
- **Actively Listen** to the person and their carers
 - **Never say never**
- Patient and carer forums
 - Influence local and national policy
 - De-mystify disability



Imagination and Creativity

**Enabling
a life worth living...**

