Middlesbrough Motor Neurone Disease Care Centre
Guidelines for provision of portable suction units for patients with Motor Neurone Disease who are cared for within community settings

Upper airway suctioning is the physical removal of secretions from the oral/nasal cavities using a suction machine in order to maintain a patient's airway, improving ventilation and oxygenation of patients who are unable to adequately clear their own secretions through effective cough or chest clearing techniques.

Informed consent will be given by the patient prior to any intervention, discussion or sharing of information.

- Patients with Motor Neurone Disease (MND) in the Middlesbrough MND Care Centre (CC) area will be assessed by one of the following MND multidisciplinary team (MDT) members before a Portable Suction Unit (PSU) can be ordered in order to ensure suctioning is appropriate and other options have been explored: MND consultant, MND Nurse & Care Coordinator, MND respiratory consultant (UHNT), Respiratory Nurse Specialist (UHNT).

- Patients who require a PSU will have a baseline oxygen saturation recorded using pulse oximetry, Forced Vital Capacity (FVC) and Sniff Nasal Inspiratory Pressure (SNIP) recorded before suctioning is commenced and regular respiratory assessments completed as recommended by NICE clinical guidelines 105 – Motor Neurone Disease – non invasive ventilation.

- The MND Nurse & Care Coordinator will arrange and track delivery of the PSU and when this is no longer required will arrange collection of the PSU.

- To ensure equity to all patients who have a PSU, the MND Nurse & Care Coordinator will carry out the training of suctioning, including how to use, suction and care for the PSU. This training will include but not exclusive to the patient, carer, family members and any healthcare professional’s involved in the patients care. (any healthcare professional providing suctioning should ensure they know and understand their local policies, guidelines & code of conduct)

- Patients who have a PSU at home will be reviewed by the MND MDT at least 3 monthly or as negotiated between the MDT and the patient to ensure suctioning continues to be the most appropriate method of airway/secretion management and other options explored, introduced and tailored to meet the patients needs as per symptoms.
Advance care planning will be discussed with all patients who have PSU’s as appropriate to the stage of their illness and support and advice given on any future care needs they have. This will be shared with all relevant health care professionals to ensure the patients choices are respected and upheld when the patient is no longer able to make those choices or self care.

- The patient who has a PSU will be continuously reviewed and monitored and if it is assessed that the PSU is no longer the most appropriate method of airway/secretion management a careful discussion with the patient, or patients advocate (if the patient is unable to communicate their needs for themselves), will take place to discuss the options available and the intention of removing the PSU. If the PSU is removed prior to a patients death, this discussion should involve all members of the MDT including the patients GP/palliative care consultant to ensure adequate support and symptom control is maintained.

**Indications:** This is not an exhaustive list and all patients should be assessed on an individual basis for suitability for a PSU at home.

- Patient’s inability to adequately clear the airway by coughing.
- More frequent and/or congested sounding cough.
- Visible secretions
- Audible secretions in chest by listening or chest auscultation.
- Unexplained increase in shortness of breath, respiratory rate or heart rate.
- Suspected aspiration of gastric or upper airway secretions.
- Indication by the patient that suction is required.
- Last days of life care patients who are distressed by upper airway secretions and are unable to self-expectorate.

**Contra-indications:**

- There are no absolute contra-indications to suctioning with benefits almost always outweighing the negatives and when indicated should be performed in order to ensure the patients airway remains patent. Failure to suction can prove to be detrimental to the patient and cause adverse reactions. However, routine or scheduled suctioning, with no indication of need is not recommended.

- The patient refuses the procedure/PSU.

**Suctioning should be used with caution and by expert practitioners only in those with the following:**

- Facial Fractures/cranial fractures
- loose teeth
- clotting disorders
- Laryngeal/oral carcinoma
- Severe bronchospasm/laryngospasm
- Stridor
- Restlessness
- Anxiety

Possible complications of suctioning:
- Hypoxia
- Trauma to the nasal or oropharyngeal tract
- Bronchoconstriction / Bronchospasm
- Incomplete secretion clearance
- Raised intra-cranial pressure
- Hypotension / Hypertension
- Laryngospasm
- Sepsis
- Cardiac arrhythmias

References