SOUTHPORT & ORMSKIRK HOSPITAL NHS TRUST
North West Regional Spinal Injuries Centre
Ventilator Free Breathing (VFB) Weaning Guidelines

SUBJECT
Guidelines for the weaning of patients with a tracheostomy, who are dependent on mechanical ventilation, due to an inspiratory and expiratory muscle weakness.

PURPOSE
To ensure guidelines are established and utilised to optimise weaning potential and to help identify those patients who will only achieve PARTIAL WEANING.

SCOPE
All clinical staff involved in the weaning process.

A Before weaning commences:
1. Discuss and explain the proposed weaning plan with the patient and family
2. Ensure chest radiograph is clear or improving.
3. Ensure arterial blood gas analysis and pulse oximetry are stabilised.
4. Ensure defined means of sputum clearance are established, eg suction and bagging

B Initial trial assessment of vital capacity (VC) will determine the weaning programme.

1. If VC is less than 250 mls, start with 5 minutes spontaneous respirations.
2. If VC is less than 500 mls, start with 15 minutes spontaneous respirations.
3. If VC is greater than 750 mls, start with 30 minutes spontaneous respirations
4. If VC is greater than 1000 mls, start with 60 minutes spontaneous respirations.

C Any change / alteration to be maintained for at least 2 consecutive days.

REASSESS DAILY.
1. 5 minutes, 10 minutes, 20 minutes, 30 minutes, 60 minutes tdi>.
2. 2 hours, 3 hours tdi**.**
3. 4 hours, 6 hours tdi.
4. 12 hours, 16 hours, 20 hours, 24 hours, start no later than 0800 hours. Once 16 hours reached, 4 hours should be at night.

PREVENT FATIGUE WITH REST PERIODS ON VENTILATORY SUPPORT.
D All weans are to be completed between the hours of 0600 hours and 2200 hours, if the patient is weaning less than 16 hours.

E At 16 hours or more, 4 hours of weaning should be completed between the hours of 0000 hours and 0600 hours, followed by the remaining hours completed during the day.
F The doctor / anaesthetist must be fully informed, with regard to the patient's progress within the guidelines, especially so in cases of rapidly advancing weans.

G Weans must be performed with the tracheostomy cuff deflated and with a tracheostomy talk device in situ (as tolerated). Oxygen saturation should be titrated to 94% using supplementary oxygen via tracheostomy mask / T-piece. Adhere to defined means of sputum clearance during VFB

H If the patient fails to meet the criteria outline in the guidelines, weaning may be held or discontinued.

I Discontinue use of the bedside ventilator when patient has been off for 48 hours and remains stable.

ACKNOWLEGEMENTS
These guidelines have been developed for patients with spinal cord lesions at the North West Regional Spinal Injuries Centre, Southport.

REFERENCES

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C.VFB Guidelines
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Carol Fairhurst, Nurse Practitioner; Dr Watt, Consultant Anaesthetist

REVIEWED: October 2014 BY: Mark Bevan, Senior Respiratory Specialist NWRSIC, Tony Ward, Spinal ITU/HDU Respiratory Ward Manager NWRSIC
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