MND Cough Augmentation Audit Tool

Motor Neurone Disease NICE guideline NG42 (2016): assessment and management

1.13: Cough effectiveness

Date:

Patient ID number:

Please use this tool to record if the person with MND was offered cough augmentation techniques as recommended by the NICE guidelines stated below. Overleaf is explanation of techniques 1-5.

Please tick in each corresponding box to indicate if 'yes' technique was offered or if 'no' please use the reason codes below.

Cough augmentation techniques offered to person with MND

Technique	YES IF YES PLEASE TICK BOX	NO IF NO PLEASE USE REASON CODE
1. Manual assisted cough	☐	☐
2. ACBT – including huff	☐	☐
3. Unassisted breath stacking	☐	☐
4. Assisted breath stacking	☐	☐
5. Mechanical cough assist device	☐	☐

Reasons code for why cough augmentation techniques were not offered

CODE	REASON
Reason A	Patient declined
Reason B	Medically not indicated, including contraindications
Reason C	Clinical reasoning for not appropriate
Reason D	Cognitive impairment preventing offering technique
Reason E	Lack of therapist education in the technique
Reason F	Lack of therapist confidence to carry out technique
Reason G	Lack of resources to carry out technique
Reason H	Other

Explanation of cough augmentation techniques

TECHNIQUE	EXPLANATION OF TECHNIQUE	REFERENCE
First-line treatment: Manual assisted cough	Physical assistance given through abdominal thrusts to increase cough effectiveness. Contraindications: paralytic ileus, internal abdominal damage, a bleeding gastric ulcer, unstable angina or arrhythmias, and spinal and rib fractures.	NG42: 1.13.1
ACBT (active cycle of breathing technique) including huff	Consists of a cycle of huffs at various lung volumes interspersed with relaxed abdominal breathing and deep breathing Caution: hyperventilation syndrome.	
First-line treatment: Unassisted breath stacking	A succession of deep breaths on top of each other, without exhaling to increase lung volume. Caution: hyperventilation syndrome.	NG42: 1.13.2
If first-line treatment ineffective or for patients with bulbar dysfunction: Assisted breath stacking	A succession of deep breaths on top of each other, without exhaling using a lung recruitment device such as modified ambu-bag. Contraindications: extra-alveolar air, e.g. undrained Pneumothorax, subcutaneous or bulla, bronchospasm and acute asthma.	NG42: 1.13.3
If assisted breath stacking is ineffective, and/or during a respiratory tract infection: Mechanical cough assist device	A machine which applies gradual positive pressure to the upper airways, followed by rapid negative pressure to simulate a cough. Contraindications: inadequate bulbar function, undrained Pneumothorax or subcutaneous emphysema, bullous emphysema, nausea, chest pain of unknown origin, severe acute asthma, recent lung surgery, raised intracranial pressure, inability to communicate, and haemodynamic instability.	NG42: 1.13.4