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Choking: is no joking matter

Dorinda Moffatt

MND and Neurorespiratory Specialist Practitioner

Prospect Hospice Moormead Road, Wroughton, Swindon, Wiltshire SN4 9BY Telephone: 01793 813355 Email: info@prospect-hospice.net Visit: www.prospect-hospice.net



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Improving health care professionals' knowledge and confidence in managing a palliative care medical emergency of adult acute choking episodes

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Choking is no joking matter

Improving health care professionals knowledge and confidence in managing a palliative care medical emergency: adult acute choking episodes

Aim

Quality improvement project to design, implement and evaluate an evidence based guidance flow chart and document for healthcare professionals on managing a palliative care medical emergency of adult acute choking episodes.

Background

Dysphagia is a common life-threatening condition referring to difficulty with swallowing ¹ which can present as a complication of over 100 different palliative conditions ². Despite its prevalence, dysphagia may be often underestimated and frequently unrecognised ³.

People with dysphagia have a high risk of acute choking episodes which is one of the most distressing symptoms of progressive disease ⁴. Dysphagia related choking is associated with significant morbidity and negative impact on quality of life ⁵.

Choking episodes can be frightening for the person experiencing them and the carers and healthcare professionals who support them ⁴⁶. It is essential to identify people at risk of choking to minimise the risk of them occurring and prepare the person, their carers and health care professionals how to confidently manage acute episodes ².

Pa	liative cor	ditions	at high ri	isk of dy	sphagia	and acu	te chokir	ng episodes	
	BO% Motor neurone disease ¹								
	B0% Parkinson's disease -								
K	80% Alzheimer's disease*								
70% Head and neck cancer*									
	S0% Prailby								
	40% Stroke ⁴								
	36% Multiple sclerosis*								
L									
Ó	10	20	30	40	50	60	70	80	
Percentage of risk									

Methodology

Quality improvement methodology was utilised to improve patient safety, effectiveness and experience of care ⁹.

This included:

- Systematic literature review and critical appraisal of current evidence, guidance and resources to produce a flow chart and guidance document.
- Key stakeholders engagement ¹⁰ including South West of England palliative care, oncology, neurology and respiratory forums, ambulance service, acute and community teams and clinical specialists to give feedback on the guidance.
- Plan Do Study Act (PDSA) cycles to monitor progress and inform next steps ¹¹.
- Healthcare professional evaluation and feedback.

Choking management guidance

- The flow chart and guidance can be used as a:
- Single page stand-alone flow chart.
- Six page guidance document with list of 29 references.
- 'Live' PDF document with hyperlinks to key information.



Scan the QR code to access the choking management flow chart and the full document on the healthcare professional resources webpage.

Evaluation/results

150 health care professionals including health care assistants, nurses, physiotherapists, occupational therapists, speech and language therapists and doctors based in community or hospital settings throughout the South West of England, completed up to one hour face to face or online education session introducing the flow chart and guidance document.

- 100% evaluated the session as "very good" or "excellent."
- 100% reported a measurable improvement to knowledge in dysphagia and managing choking episodes.
- 95% reported a measurable improvement in confidence in managing choking episodes.

Next steps

- Launch the guidance document widely through dissemination and education sessions.
- Incorporate into ICS (Integrated Care System).
- Modify the flow chart to be adaptable for individual patient management plans.
- Explore producing a choking management app for smartphone use.

Special thanks to Macmillan and Motor Neurone Disease Association for funding the 'Evidencing Work Based Learning' module and the University of the West of England Macmillan team for supporting and guiding the project.

Healthcare professional feedback



Discussion and conclusion

Dysphagia related acute choking episodes is common in palliative care conditions. It is essential health care professionals are able to effectively prepare for and manage choking incidents because 'WHEN YOU CAN'T BREATHE... NOTHING ELSE MATTERS'¹².

The use of an evidenced based flow chart and guidance document has demonstrated to be an effective tool in improving healthcare professional's knowledge and confidence in managing this distressing symptom.

Contact information

For further information regarding the project please contact Dorinda Moffatt via dorindamoffatt@prospect-hospice.net

Risk of dysphagia and choking



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What is choking?



'Severe difficulty in breathing because of a <u>constricted</u> or <u>obstructed</u> throat or lack of air'

- Airway agitation leading to sudden coughing
- Most commonly due to a foreign body in the airway: food, liquid, saliva
- Partial choking person coughing is still able to breathe & cough
- Complete choking too weak to cough / complete obstruction of airway
- Lack of air causes onset of respiratory distress
- Choking episodes should be considered a symptom
- Distress leads to poor quality of life

Signs and symptoms of choking

- Difficulty breathing or coughing
- Sudden inability to speak, particularly after eating or drinking
- Hand signals and signs of panic or distress
- Clutching, grasping or pointing to their chest or throat (universal sign for choking)
- Gaging or wheezing
- A red puffy face
- Disorientation / passing out
- Turning blue cyanosis (blue colouring to the skin, can be seen earliest around the face, lips and fingernail beds



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Choking episodes in MND

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- Dysphagia
- Bulbar muscle weakness
- Acknowledged risk of feeding / drinking
- Blockage of enteral feeding tube
- Hypersalivation / Sialorrhoea
- Dehydration
- Secretions

- Laryngospasm
- Respiratory muscle weakness
- Weak ineffective cough
- Other:
 - \circ Frailty
 - Fatigue
 - o Pain
 - o Anxiety

Cough augmentation NICE guideline NG42. MND: assessment and management

Technique	Explanation of technique	Picture
First-line treatment:	Physical assistance given through abdominal thrusts to	
Reference NG42: 1.13.1	increase cough effectiveness. Contraindications: paralytic ileus, internal abdominal	
Manual assisted cough	damage, a bleeding gastric ulcer, unstable angina or arrhythmias, and spinal and rib fractures.	
	Consists of a cycle of huffs at various lung volumes interspersed with relaxed abdominal breathing and	The Cycle
ACBT (active cycle of breathing technique) including huff	deep breathing Caution: hyperventilation syndrome.	Deep breathing
First-line treatment: Reference NG42: 1.13.2	A succession of deep breaths on top of each other, without exhaling to increase lung volume.	Breathing control
Unassisted breath stacking	<u>Cauton</u> . hyperventilation syndrome.	S or S

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Small-long huff

Big-short huff

Cough augmentation

NICE guideline NG42. MND: assessment and management

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Technique **Explanation of technique** Picture A succession of deep breaths on top of each other, If first-line treatment ineffective or for patients with bulbar without exhaling using a lung volume recruitment (LVR) dysfunction: device such as modified ambu-bag. Contraindications: extra-alveolar air, e.g. undrained Assisted breath stacking Pneumothorax, subcutaneous or bulla, bronchospasm Reference NG42: 1.13.3 and acute asthma. If assisted breath stacking is A machine which applies gradual positive pressure to ineffective, and/or during a the upper airways, followed by rapid negative pressure respiratory tract infection: to simulate a cough. Contraindications: inadequate bulbar function, Mechanical cough assist undrained Pneumothorax or subcutaneous emphysema, (mechanical insufflationbullous emphysema, nausea, chest pain of unknown exsufflation) device origin, severe acute asthma, recent lung surgery, raised Reference NG42: 1.13.4 intracranial pressure, inability to communicate, and haemodynamic instability.



Guidance for healthcare professionals

Palliative care medical emergency: Adult acute choking episodes

This guidance is designed for adults at risk of acute choking episodes due to <u>dysphagia</u>¹ or laryngeal spasm. This includes people who may experience a weak ineffective cough due to respiratory muscle weakness.

For *palliative conditions*² including *head and neck cancers*³, *motor neurone disease*⁴, *multiple sclerosis*⁵, *parkinson's disease*⁶ and people with *frailty*⁷. **For further information:** click on the *bold italic and underlined* wording which will redirect you to the original reference. A list of references are on pages five and six of this document.





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Guidance for healthcare professionals

Palliative care medical emergency: Adult acute choking episodes

Dealing with a choking emergency

- Follow the managing choking episodes guidance on previous page.
- Try to stay calm, reassure and clearly explain what's happening to the patient and any family, friends or carers who are present.
- Call for help.
- Tell any family or friends who are not there about the emergency, if appropriate.

After an emergency

Update care plan and review of swallow as appropriate.

 Dealing with a palliative care emergency can be distressing. Patients, carers and healthcare staff are likely to require considerable practical, psychological and spiritual support. If you need support afterwards, speak to your manager or colleagues.

Signs and symptoms of choking

Look for:

- Difficulty breatning or cougning.
- Sudden making to speak, particularly in cating of an
- Clutching, grasping or pointing to their chest or throat (the univers sign of choking).
- Gagging or whee;
- A red puffy face,
- Disorientation/passing ou
- Turning blue Cyanosis, a blue colouring to the skin, can be

earliest around the face, lips, and fingernail beds.



Prepare for a palliative care choking emergency

Dysphagia can present as a complication of many <u>palliative conditions</u>² including head and neck <u>cancer</u>¹⁷, motor neurone disease, multiple sclerosis, parkinson's disease and people with frailty. A small number of these conditions may also experience additional symptoms of sialorrhea, laryngeal spasm and respiratory muscle weakness resulting in an ineffective cough. These symptoms can cause extremely distressing coughing and choking episodes where the airway is partly or completely blocked, meaning the person may be unable to breathe properly.

Choking is a medical emergency and the person requires immediate help.

It is essential to identify people at risk of choking episodes, to minimise the risk of choking occurring and prepare how to manage acute episodes.

normal working hours and out of hours. Be clear what your role is, in the care

team when dealing with an emergency.

Prepare ¹⁶ for a potential choking emergency ¹⁸ in the following ways: • Check your local policy so you know who to contact in an emergency in

- Identify which patients are at risk of choking episodes and complete <u>cough</u> ¹⁰ <u>assessment</u> ²⁰ including understanding reasons for cough, fears and to look for potentially reversible causes.
- For weak ineffective moist cough a prescribing professional may consider <u>antisecretory pharmacological management</u>²¹.
- A prescribing professional may consider 'just in case' medication in the event of acute choking such as <u>oromucosal midazolam (buccolam)</u> "10mg/2mls pre-filled oral syringes.
- A multi-disciplinary approach is most beneficial in order to implement holistic management. This may include, <u>physiotherapy</u>²⁹, <u>dietetics</u>²⁰, <u>speech and</u> <u>language therapy</u>²⁹, <u>nurses</u>²⁸ and <u>doctors</u>²⁶ as well as the individual and their family and/or <u>carers</u>²⁷.
- Know what the patient's wishes are in case of an emergency. For example, whether they would want to be admitted to hospital, and whether they have a Do Not Attempt Cardiopulmonary Resuscitation (DNACRP) order or <u>ReSPECT</u>²⁰ documentation. Discussions must be recorded in medical records.
- Complete a patient and carer plan for management of an acute choking episode including <u>written and pictorial information</u>²⁸.
- Help the person and those close to the patient to understand what to expect if there is an emergency. Approach the conversation sensitively and be aware it may make them more worried. Although choking to death is commonly feared, it is important to offer reassurance this is very rare.



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		Speech and language therapy	24	https://www.rcsit.org/		
		Nurses	25	https://www.rcn.org.uk/		
		Doctor	26	https://www.rcplondon.ac.uk/		
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		Prospect Hospice Moormead Road, Wroughto	in, Swindon, W	Ishire SN4 98Y Fellow us on social media: President: Her Majesty The Queen Consort Used Consort		
	5	Telephone: 0793 813355 Email: info@prospect-hospic Visit: www.prospect-hospice		Registered charity number: 28003 Company registration: 144609		





"Will I choke to death?"



- Choking to death is commonly feared for pwMND
- However....choking episodes **DO NOT** result in a sudden death
- Offer reassurance this is extremely rare
- Data demonstrates approx. 98% cause of death in MND is generally following a peaceful hypercapnic coma
- Patients, carers & health care staff who care for them are likely to require considerable practical, psychological & spiritual support in managing distressing episodes



For more information about MND see NICE guideline NG42 and visit www.mndassociation.org

https://www.mndassociation.org/sites/default/files/2022-11/Paramedic-card.pdf

- Patients presenting with respiratory distress due to chronic neuromuscular weakness will rapidly retain carbon dioxide (hypercapnia)
- Oxygen does not help breathlessness
- Can have a serious detrimental effect reducing respiratory drive / increase CO2 retention / lead to respiratory failure & death
- Oxygen therapy should be used with extreme caution in patients with MNDrelated respiratory problems
- Monitored by arterial blood gas analysis
- Palliative oxygen may be appropriate but at lowest levels with aim to wean
- Aim sats 88%-92%
- Video: https://bit.ly/MND-Oxygen

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V1 Developed by Dorinda Moffatt Specialist Neurorespiratory Physiotherapist/Specialist Frailty Therapist, February 2023 - review date February 2025

Prospect Hospice Moormead Road, Wroughton, Swindon, Wiltshire SN4 9BY Telephone: 01793 813355 Email: info@prospect-hospice.net Visit: www.prospect-hospice.net

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- MND Association contact helpline Tel: 0808 802 6262



WHEN YOU CAN'T BREATHE... NOTHING ELSE MATTERS

EVERYDAY IS A MATTER OF LIFE AND BREATH

(Hough, 2014)