Nasogastric (NG) feeding on Acute Stroke unit, Morriston Hospital- policy document

Situation: Dysphagia (swallowing difficulty associated with foods, fluids and saliva) is common after acute stroke with an incidence between 40 and 78% [1]. This is associated with poor outcomes including higher length of hospital stay, chest infection, disability and even death. Many people recover from this but anyone with dysphagia as assessed by bedside swallow screening will need specialist swallow assessment and will need a decision on Nasogastric (NG) tube feeding within 24 hours of admission [1]. We undertook a Quality Improvement work to improve nutritional care delivered on Acute Stroke Unit.

Background: On Acute Stroke Unit (ward F), Morriston Hospital, we have introduced the use of Nasogastric tube (NGT) decision tool (appendix 1), part of the NGT insertion bundle, which helps document the risk benefit discussions prior to inserting an NGT. Although the team were using some part of the NGT care bundle on the ward, the first page where medical and nursing team needs to document the decision making was left incomplete, prior to the quality improvement work undertaken. Delays in inserting an NGT could be due to variety of reasons including delayed discussions with family members in those who lacks mental capacity to decide on artificial nutrition. An early discussion with patient and or family is required to minimise this delay. We are also monitoring the time taken from decision making to initiation of nutrition which is influenced by many factors.

Actions:

- A decision to insert an NGT should be followed by detailed discussion and documentation of the risk- benefit in case notes, aided by the NGT care bundle (appendix 1), signed by the medical and nursing teams. This should also be accompanied by completion of an Emergency feed regime (appendix 2) to avoid delays in starting nutrition once NG position is confirmed.
- Once the risk-benefit discussions have happened and the decision tool is completed, this remains valid unless there is a significant clinical change. This would mean, the tool does not need re-doing out of hours or weekends as long as patient remains without a significant clinical change.
- MDT labels should have NG section completed regarding appropriateness of NG insertion and re-insertions in those with unsafe swallow.
- In those lacking mental capacity, discussion with family members regarding risk – benefit of NGT/ artificial nutrition should be clearly documented, along with enquiry regarding existence of a Lasting Power of Attorney (LPA).
- A mental capacity form will need to be completed specific for artificial nutrition/ NGT insertion and a best interest decision to be made in consultation with family members (if there is no LPA in place refusing intervention/artificial nutrition).
- In those needing restrictive management including mittens or a nasal bridle, a Deprivation of Liberty Safeguard (DOLS) form will need to be completed and

actioned. Where possible, least restrictive methodology to be used and this may vary on a person to person basis, the decision to be made in the MDT with consultation with patient's family/ next of kin.

- Nasal Bridles can also be used as a fixing device with patient's consent if there is risk of accidental displacement of the NGT.
- NG feed initiation time should be clearly documented on the NG care bundle and nursing records to continue improving nutritional care given on acute stroke unit.
- New admissions over a weekend with unsafe swallow (and limited SALT input) will need NG risk-benefit discussions undertaken by the on-call team. Ward staff to make sure printed copies of the NGT decision tool along with the Emergency feed regime are available for the on call team to complete.

Results:

Our documentation in MDT has improved since the introduction of the new MDT labels. Completion of the NGT decision aid document has improved for all NGT insertions. Overall, we have reduced the time taken to insert a new NG on ward F from an average of 5.2 hours (June 2023) to 1.7 hours (February 2024) and would like to keep improving this. We are also monitoring and working towards improving the NG feed initiation time on Acute Stroke Unit. We are in the process of obtaining patient /relative feedback on nutritional care received on the Acute Stroke unit.

References:

1. National Clinical Guideline for Stroke for the UK and Ireland. London: Intercollegiate Stroke Working Party; 2023 May 4. Available at: www.strokeguideline.org.

2. Clinical Policy for the insertion and maintenance of Nasogastric feeding tubes in adults: SBU COIN policy document CID 504

NG feeding policy for Acute Stroke Unit

Appendix 1 – NGT Insertion Care Bundle

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Is a Nasogastric Tube the right decision for this patient?
To be completed by the consultant/authorised deputy & senior nurse involved in the decision

Patients Name		
Hospital Number		
Date of Birth		

Clinical Assessment	Yes	No
Does the patient have any suspicion of an oesophageal fistula? Does the patient have a basal skull fracture?		
Does the patient have a pharyngeal pouch?		
Is the patient receiving Non-Invasive Ventilation? Does the patient have a hiatus hernia?		
Is there any suspicion of upper GI abnormality? Is the patient comatose/semi-comatose?		
Is the patients clotting out of normal range and high risk of bleeding? Is there a history of nasal septum defects or polyps?		
Is there a history of nose bleeds?		
Is there a history of non-compliance (pulling out IV devices, resistance to care)?		

If yes to any of the above, nasogastric insertion may carry significant risk. If there is suspicion that insertion is risky, discussions with or referral to the following must be completed.

Referral to, *please tick below*

	Yes	No	Print Name	Signature
Respiratory Team				
ENT Team				
Upper GI Specialists				
Only proceed with further assessment if specialist team not required				

Capacity and Nasogastric Tube Therapy Assessment

We confirm that the above assessments have been undertaken and this patient requires NG tube for;

Feeding	Fluids	Medication	Drainage

Please tick and accept any potential risks that remain, additional risks identified beyond the above assessments are;

The intended benefits are;

The risks and benefits have been explained and the patient and/or relative/carer fully understands these and is able to provide informed consent. The clinical need and requirement for nasogastric therapy will be reviewed by the consulting team within 1 week (as a minimum).

	Yes	No
Date for review (maximum 1 week):		
Any nasogastric tube literature provided to the patient		

Consultant (or nominated deputy):	GMC Number:
Signature:	Date:
Senior RGN Name:	NMC PIN:
Signature:	Date:

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Appendix 2

CID: 350 Published: December 2011 Last Review: April 2020 Next Review: April 2022

Addressograph

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Enteral Feeding Regimen for Adults –
To use out of hours when dietitian unavailable

- Doctor to see any patient who needs to commence enteral feeding outside working hours of the dietitian. Request for enteral feeding must be documented in the patient's medical notes. This regimen is not suitable for patients with anorexia nervosa (see link to guidelines for the nutritional management of patients with eating disorders). If the patient has had surgery to the pancreas, severe acute pancreatitis or chronic pancreatitis to start Peptamen instead of Osmolite
- Doctor to assess the risk of refeeding syndrome in order to recommend the appropriate regimen as outlined below. Please see information on refeeding syndrome overleaf
- Refer to dietitian immediately so that a full nutritional assessment can be made on the next working day
- Doctor to consider and prescribe supplementary fluids as required

Doctor to complete and retain at bed-end

The patient is assessed as low risk and should therefore be commenced on Regimen 1
Doctor's Name: _____ Doctor's Signature: _____

The patient is assessed as high/ severe risk and should therefore be commenced on Regimen 2
Doctor's Name: _____ Doctor's Signature: _____

Regimen 1: Patient at Low / Moderate Risk of Refeeding Syndrome

Day	Name of Feed	Rate (ml/hr)	Duration (hr)	Total Volume of feed/ 24hr (ml)	Water flush before and after feed (ml)
Day 1	Osmolite	50ml/hr	20hr	1000ml	50ml
Day 2	Osmolite	50ml/hr	20hr	1000ml	50ml
Day 3	Osmolite	75ml/hr	20hr	1500ml	50ml

When Day 3 reached please continue at this rate until Dietetic review

Regimen 2: Patients at High / Severe Risk of Refeeding Syndrome:

Day	Name of Feed	Rate (ml/hr)	Duration (hr)	Total Volume of feed/ 24hr (ml)	Water flush before and after feed (ml)
Day 1	Osmolite	25ml/hr	20hr	500ml	50ml
Day 2	Osmolite	40ml/hr	20hr	800ml	50ml
Day 3+4	Osmolite	50ml/hr	20hr	1000ml	50ml
Day 5	Osmolite	75ml/hr	20hr	1500ml	50ml

When Day 5 reached please continue at this rate until Dietetic review

Checking of NG tube position: The position of the nasogastric feeding tube should be checked with pH paper prior to each feed administered, in accordance with Swansea Bay HB policy (see link for guidelines)

Paper copies of this document should be kept to a minimum and checks made with the electronic version to ensure that the printed version is the most recent.

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Authorisation Form for Publication onto COIN

PLEASE ENSURE THAT ALL QUESTIONS ARE ANSWERED – IF NOT APPLICABLE PLEASE PUT N/A

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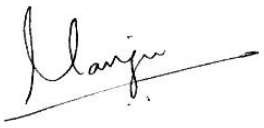
Sign to confirm that the document has been authorised by an approved governance process in a specialty or delivery unit.	
If NICE guidance been considered/referenced when producing this document, please provide the title or reference number.	Yes, National Clinical Guideline for Stroke for the UK and Ireland. London: Intercollegiate Stroke Working Party; 2023 Available at: www.strokeguideline.org.
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