The Hearing Aid Podcasts

Episode 8.08
Risk Feeding

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Learning Outcomes

Knowledge

- To understand what feeding with acknowledged risk means
- To recall the situations in which swallowing might become impaired
- To recall the risks and benefits of 'risk feeding'.

Skills

- To recognise when advance care planning around swallowing might be appropriate to consider

Attitudes

- To appreciate that a decision to feed with risk is not always clear cut.
- To recognise the autonomy of individuals in decision making.
- To reframe 'risk feeding' as feeding with acknowledged risk.

Definitions

Formal definition

"If a patient is deemed unsafe to eat and drink and is found to be unsuitable for alternative nutrition and hydration, then risk feeding may be considered. Risk feeding is also indicated if the patient has capacity, and fully understands the high risks of aspiration of oral intake, but chooses to continue to eat and drink."

RCSLT website

Practical definition

When we talk about "risk feeding", one of the commonest things we are concerned about is the risk of food entering the airways, either high up, causing choking, or lower down, causing aspiration.

Eating and drinking with acknowledged risk of aspiration (and/or airway obstruction) may also include acceptance that oral intake is unlikely to meet nutrition/hydration requirements.

Other terminology to be aware of: 'comfort feeding', 'careful hand feeding'.

Main Discussion

Why is risk feeding necessary sometimes?

There are several conditions which affect swallowing, usually related to a neurological condition

- Acute: stroke
- Chronic neurodegenerative: MS, Dementia.

Less frequently, it may be related to muscle function

- Myopathy
- Sarcopenia.

There are lots of reasons that an older person's swallow might not function properly at each stage:

Oral preparation:

- Chewing and mixing with saliva
- Voluntary
- Glossopalatal seal ensures no premature loss of bolus into pharynx during oral preparation

Oral phase:

- Tongue moves food bolus back into the throat

Changes in normal ageing:

- Reduced ability to smell and taste foods.
- Reduction of saliva production.
- Chewing difficulties:
- Difficulty manoeuvring the tongue
- Difficulty forming a cohesive bolus
- Fatigue when chewing foods and forming a bolus
- Dentures may increase chewing difficulty, especially if they're loose fitting.
- Food residue after swallowing may lead to poor oral hygiene, oral discomfort and mouth odour.

Pharyngeal phase:

- Controlled by brainstem, both motor and sensory
- Once initiated is involuntary and mediated by the ANS
- Complicated: we'll come back to this...

Oesophageal phase:

- Moves down oesophagus to stomach

NERD ALERT

One of the commonest things we are concerned about when we talk about risk feeding is the risk of food entering the airway, and the pharyngeal part of swallowing is the part where the throat splits into oesophagus and trachea.

Pharyngeal phase in more detail:

- Palate raises and velopharyngeal closure ensures no nasal regurgitation.
- Base of tongue to posterior pharyngeal wall: contact aids bolus drive through pharynx, as does contraction of the pharyngeal walls to achieve a 'stripping' motion.
- Inhibition of the cricopharyngeus - the upper esophageal sphincter.
- Hyolaryngeal elevation - upward movement helps to 'squeeze' laryngeal vestibule closed. Anterior tilt enables epiglottic deflection (preventing bolus from entering laryngeal vestibule) as well as opening of the relaxed cricopharyngeus to allow bolus passage into the oesophagus.
- Closure of true vocal cords = last level of protection to prevent food entering the lungs.

Common in normal ageing:

- Delay in involuntary reflex to initiate the pharyngeal phase.
- Decreased sensation in the throat and larynx may reduce ability to sufficiently clear all food/fluid, resulting in residue/coating of food/fluid in the throat.
- Reduced pharyngeal drive due to generalised muscle weakness, contributing to food/fluid residue which may increase the prevalence of it entering the wind pipe.
- Drop in laryngeal position
- Ossification of hyoid, thyroid and cricothyroid cartilage
- Increased incidence in cervical osteophytes
- Increased incidence of pharyngeal pouch

Breathing and swallowing:

- At the moment when the true vocal cords close, there is a moment of apnoea.
- Swallowing usually occurs during expiration.
- In severe respiratory disease
    - True vocal cords may not close and so alternative mechanisms are needed to protect the airway.
    - Airway protection may also be compromised due to reduced laryngeal sensitivity associated with chronic cough and reflux.
    - Likelihood of other comorbidities which might affect swallowing, such as GORD, are also higher.
    - Less time might be spent in expiration (due to 'air hunger') and the swallow tends to occur during inhalation.
    - People with respiratory difficulties are more likely to have pharyngeal residue and to inhale immediately post-swallow, increasing the risk of post-swallow aspiration.
    - Respiratory centre directly inhibited by swallowing centre during swallowing, so this can cause an incoordination of breathing in an already stretched situation making aspiration more likely.
    - Evidence suggests a whole host of swallowing impairments associated with respiratory disease, including reduced hyolaryngeal excursion, reduced cricopharyngeal opening (which may be associated with reflux), delayed swallow, reduced oral control and so on ...

When to consider risk feeding

<u>Severe dysphagia and CANH not appropriate</u>

e.g. in advanced dementia, when risks of CANH outweigh benefits, or if not possible due to other gastro issues

More on advanced dementia in the CANH MDTea podcast (7.10) - but in summary: There is no good evidence to support PEG feeding in advanced dementia. Cervo et al 2006: PEG seldom effective in improving nutrition, maintaining skin integrity, preventing aspiration pneumonia, improving functional status or extending life. Alzheimer's Society suggests that 'quality of life rather than length of life should be prioritised'

Patient choice
Electing to go against SLT advice.
Consider MCA.

As a 'least restrictive option'
May be an MDT best interests decision to accept risk as the 'least restrictive' option, and to maximise quality of life
- Patient may be at risk of malnutrition/dehydration on 'safer' consistencies and therefore risks have been weighed against aspiration risk

Comfort/quality of life, particularly in palliative patients

Other less finite situations

- May be in addition to CANH, e.g. small quantities of 'tastes for pleasure'
- As part of swallow rehabilitation programme
- Pending further investigations

The process of making risk-feeding decisions

RCSLT Dysphagia guidance (from webpages): "... a formal risk feeding process would address capacity, ethics and quality of life issues, providing the multidisciplinary team with a patient-centred framework to facilitate decisions on nutrition planning. The risk feeding process ensures that all aspects of care and outcomes are considered. This approach results in a respectful and dignified patient-centred decision, which is made with serious thought and over a reasonable time frame."

RCSLT Dysphagia Website

There is no formal, nationally agreed approach but various Trusts have their own processes and protocols and some have been published and shared, for example Dharinee Hansjee's work at Lewisham & Greenwich, or the 'FORWARD' bundle at Guy's and St Thomas' (Feeding via the Oral Route with Acknowledged Risk of Deterioration)

Generally, approaches include the following elements (terminology borrowed from the FORWARD bundle): identification, decision-making, implementation, and escalation planning.

The Royal College of Physicians (2010) suggest four key questions should be answered:

1. what is the underlying diagnosis?

2. what is the mechanism of the oral feeding problem?

3. can the person eat and drink, and, if so, at what risk?

4. what are we trying to achieve?

Identification:

- SLT to assess swallow, provide dysphagia diagnosis and prognosis
- MDT to consider *nature* of risk (aspiration, asphyxiation, malnutrition/dehydration with support from dietitian, ineffective oral medication), degree and frequency of risk, and likely consequences
- Outline alternative solutions and any modifications/strategies which might eliminate or minimise risk - is CANH appropriate? Can anything else be done to enhance swallowing function/safety?

Points to consider:

- The nature of the patient's dysphagia.
- The patient's diagnosis.
- The patient's prognosis.
- The patient's eating and drinking baseline.
- Whether the patient's clinical picture is transient and reversible in nature or unlikely to improve even with treatment.
- How future management will impact on the patient's quality of life.

Minimising (but not eliminating) risk, and maximising comfort

The usual safe feeding precautions:

- Ensure upright and alert for all oral intake
- Follow any SLT recommendations for safest food/fluid consistencies, feeding or swallowing strategies, and equipment
- Provide supervision and assistance as required - set up, hand-over-hand support, or full assistance
- Slow pace of feeding, ensuring mouthfuls have been swallowed before giving more and making sure the oral cavity is empty at the end of the meal
- STOP if the person is coughing excessively or showing signs of distress. Try again later.

Dharinee Hansjee's 5 Fundamental Ms:

- MDT involvement
- Maximising posture
- Mealtime preparation
- Mouth care
- Medication management

Appropriate nursing handover should take place to ensure that risk is acknowledged and minimised with scrupulous oral care and optimum seating position and that, where required, careful hand feeding is offered. In an acute setting it is also essential to inform the relevant physiotherapist so that chest intervention can be discussed.

Why NOT risk feed?

The BGS Good Practice Guide on Dysphagia Management for Older People towards the end of life suggests that the following must be considered when making dysphagia management decisions towards the end of life:

- Acute vs chronic dysphagia
- Underlying medical conditions

- Nutritional status
- The stage of their condition
- The prognosis

Advanced planning / escalation planning

By nature of risk feeding, the person (in a chronic situation) will usually have a condition with significant risk of deterioration and / or frailty: so need general ACP, as well as specifically in relation to swallow and risk feeding.

- Medics to document suggested management strategies in the event of deterioration, e.g. chest PT, parenteral fluids, antibiotics, hospital readmission, symptom control measures
- Clear ceiling of care
- Identification of when appropriate to review:
    - Change/deterioration in swallow function
    - Other change in patient's circumstances which may affect decision
    - Severe consequences related to risk-feeding which prompt review
    - Patient changes mind

Advance Care Plan (ACP): if the patient has an ACP this should be mentioned in the management plan. If the patient does not have an ACP, and the patient has capacity to put this in place, then this option should be discussed.

Case: Harry
Harry is an 89 year old nursing home resident with advanced Parkinson's disease, as well as COPD. He has a longstanding dysphagia and his diet has been modified over time by SLT to mildly thick fluids and a pureed diet. He is underweight and has oral nutritional supplements, prescribed by the dietitian. Harry develops a chest infection - the third in 3 months - and the GP decides that he should be treated with antibiotics at home. The SLT reviews him and finds that he is showing overt signs of aspiration - coughing - on all food and fluids. This is even worse with thicker fluids, which seems to be due to reduced breath-swallow synchrony due to his COPD and more acute respiratory difficulties. Harry has had discussions with the SLT about tube feeding in the past, and has always maintained he would not want it.

In this case it would be appropriate to consider risk-feeding and it would appear, given Harry's clinical condition, prognosis and dysphagia history, that this may be indicated if Harry and the MDT are in agreement.

Case: Ethel
Ethel is a 76 year old lady with a diagnosis of Alzheimer's disease. She has been admitted from her own home to the Acute Medicine Unit with a chest infection. Her daughter, who is her main carer, reports recent coughing on oral intake - fluids, more than food - but she has not previously been seen by SLT. Ethel normally communicates verbally and can have conversations, but struggles to remember new information. She has been forgetful around the home, leaving the oven on and the front door open, and is therefore felt to need supervision at all times.

On admission, Ethel is delirious. She has been very drowsy but, even when more alert, she is not communicating much verbally or following commands, and is very distractible. On SLT assessment her cognition appears to be significantly affecting her swallow safety as she is bolus holding for long periods and coughing when she gets distracted and moves around. The SLT deems her to be unsafe for oral intake but expects that some improvement to swallow function and safety may be anticipated in line with resolving delirium and improving medical condition.

In this case it may be appropriate to delay a risk-feeding approach, either by considering short-term NG or a period of NBM with IV fluids. Ethel's dysphagia appears to be fairly new and mild at baseline, with her current presentation being significantly off-baseline as a consequence of acute medical decompensation, and with a good deal of reversibility. She is not in the end stages of her dementia and has potential to resume safe oral intake, perhaps with SLT-guided modifications, once she recovers from her chest infection and delirium. A decision to commence risk-feeding now may be life-limiting.

Myths

Risk feeding is always an option

Patients who are risk-feeding are very unwell/approaching end of life

Risk-feeders are at risk on all oral intake

Patients who are risk-feeding need to be reviewed by SLT on admission

Controversies

Concerns have been raised about both the terminology of 'risk feeding' and the potential pathways being established after identification of 'risk' in patients with dysphagia, for example by Murray, Mulkerrin & O'Keefe in Age & Ageing this year. Specifically they think the term 'feeding' is demeaning and that labelling a care plan as 'risk' anything may mean that there is an assumption that aspiration will lead to pneumonia, and that care plans will not be individualised.

This has led to some debate and a response by Dharinee Hansjee at Lewisham and Greenwich, who has published many pieces about risk feeding and developed a protocol. She conducted a survey finding that 43% of comments from professionals were supportive of the term 'risk feeding', and 28% neutral towards it.

My opinion is that the most important thing is to ensure that training, pathways and protocols are clear on what is meant by risk feeding and encourage individualised care plans and supporting guidance for any risk feeding decisions.

Curriculum Mapping

NHS Knowledge Skills Framework

- Core 1 Level 3
- Core 2 Level 1
- HWB2 Level 3
- HWB5 Level 2
- HWB7 Level 2

Foundation Programme

- Sec 1:2 Patient centred care
- Sec 1:2 Trust
- Sec 1:3 Mental capacity
- Sec 1:4 Self directed learning
- Sec 2:6 Comm. patients/ relatives
- Sec 3:10 Long term conditions in unwell pt, Frail pt, Nutrition

Core Medical Training

- Top presentations: Management of Patients Requiring Palliative and End of Life Care
- Principles of medical ethics and confidentiality: Ethical decision making
- Other important presentations: Swallowing Difficulties
- Geriatric medicine: MDT assessment, Nutritional assessment, Dementia, Movement disorders including Parkinson's disease, Malnutrition

GPVTS (Section 3.05: Care of older adults)

- 3.05 Communication and consultation
- 3.05 Making decisions
- 3.05 Practising holistically and promoting health
- 3.05 Working with colleagues and in teams

Geriatric Medicine Specialty Training

- Managing long term conditions and promoting patient self-care: Quality of life
- Principles of medical ethics and confidentiality: Ethical decision making
- 32. Delirium
- 33. Dementia
- 37. Nutrition
- 39. Movement Disorders
- 43. Palliative Care
- 45. Stroke Care

References:

Royal College of Physicians (2010). Oral feeding difficulties and dilemmas: A guide to practical care, particularly towards the end of life. Report of a Working Party. Royal College of Physicians. www.rcplondon.ac.uk.

Mental Capacity Act (2005)

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/224660/Mental_Capacity_Act_code_of_practice.pdf

'An Acute Model of Care to Guide Eating & Drinking Decisions in the Frail Elderly with Dementia and Dysphagia' - Dharinee Hansjee, Geriatrics 2018, 3, 65; https://www.mdpi.com/2308-3417/3/4/65

'5 Fundamental Ms: cutting aspiration risk in patients with dementia and dysphagia' - Dharinee Hansjee, *Nursing Times,* March 2019, https://www.nursingtimes.net/clinical-archive/nutrition/5-fundamental-ms-cutting-aspiration-risk-in-dementia-and-dysphagia-patients/7028326.article

The perils of 'risk feeding' - Aoife Murray, Siofra Mulkerrin, Shaun T O'Keeffe, *Age and Ageing*, Volume 48, Issue 4, July 2019, Pages 478–481, https://doi.org/10.1093/ageing/afz027

THE FORWARD BUNDLE—A NOVEL TOOL TO IMPROVE THE CARE OF PATIENTS FEEDING AT RISK , P.J. Sommerville, A. Lang, S. Carrington, J. Birns, *Innovation in Aging*, Volume 1, Issue suppl_1, July 2017, Page 206,https://doi.org/10.1093/geroni/igx004.779