Medicines and the Dysphagia Pathway

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What is Dysphagia?

Describes a swallowing disorder usually resulting from a neurological or physical impairment of the:

- oral (mouth),
- pharyngeal (upper throat)
- or oesophageal (lower throat) mechanisms.
When is dysphagia a problem?

- Common complication of other conditions, occurring in up to
  - two thirds of patients suffering stroke
  - two thirds of patients with dementia,
  - a quarter of patients with Chronic Obstructive Pulmonary Disease
- Associated with aspiration pneumonia and this can lead to poor functional outcomes, such as dehydration, malnutrition, increased length of hospital stay, and death
Patients with dysphagia are unable to take some oral formulations of medication.

Medication administration errors have been found more than three times as frequently in patients with dysphagia than in those without.
Patient with swallow difficulties always need liquid medicines

A) Yes
B) No
Mr SM, 83 male patient with vascular dementia, Hypertension and previous TIA admitted to hospital with chest infection.

On admission, daughter informs that patient has difficulty swallowing medication and is referred to Speech and language therapist (SLT).

Recommendation is **Stage 1 fluids and puree diet.**
Modified fluids and diet

While pharmacists commonly encounter solid and liquid medication, SLTs have classified food and fluid consistencies to meet swallowing needs. These can be used to support safe oral administration of medicines where simple liquid or solid medication may not be safe.
What are “stages” of fluids?

**Stage 1:**
SYRUP CONSISTENCY

**Stage 2:**
CUSTARD CONSISTENCY

**Stage 3**
PUDDING CONSISTENCY

Follow instructions as per brand of thickener selected to create appropriate consistency eg Hormel’s Thick and Easy.

What are food textures?

**Texture B Thin blended diet’**
Cannot be eaten with a fork.
pours from a spoon rather than drops in a lump
e.g. tinned tomato soup, runny yoghurt, thin custard

**Texture C ‘Thick blended diet’**
Can be eaten with a fork.
Smooth with NO LUMPS
no chewing required.
e.g. purees, blancmange, smooth fromage frais mousse, whipped double cream.

**Texture D Mashed Diet**
Requires very little chewing
eg mashed potato, kitchree, well cooked mashed fish

**Texture E Soft Diet**
Requires gentle chewing.
Solids and thick sauces
e.g. sponge pudding, fish in sauce, banana, macaroni cheese, potato, cooked carrots bread with soft filling, tinned fruit
Medication

- Ramipril capsules 1.25mg daily
- Dipyridamole MR 200mg twice daily
- Aspirin 75mg daily
- Ferrous fumarate 140mg/5ml liquid - 210mg daily
- Lansoprazole 30mg daily
- Clarithromycin 125mg/5ml liquid - 500mg (20ml) twice a day 5/7
- Co-amoxiclav 250 and 62mg/5ml liquid - 10ml three x a day 5/7
- Simvastatin tablets 40mg at night
- Paracetamol 500mg- 1000mg four times a day
Ramipril capsules 1.25mg daily – swallow whole with puree/yogurt – if unable then, open capsule, mix contents with puree food/yogurt
  • alternative is ramipril tablets if available

Dipyridamole Mr 200mg twice daily
  • STOP: change to clopidogrel 75mg- administer whole with puree/yogurt – if unable then, crush and administer
Aspirin 75mg daily
  • STOP : change to clopidogrel 75mg- administer whole with puree/yogurt –if unable then, crush and administer
• Ferrous fumarate 210mg tablet
  • Administer tablet whole with yogurt/puree food
  • If unable to administer tablet whole, crush and administer
  • While liquid does thicken with thickener but NOT VERY PALATABLE
• Lansoprazole 30mg daily- “fast tab” administer with puree/ or open capsule and sprinkle pellets on food/puree
  • food should be room temperature
Medication amended

Clarithromycin 125mg/5ml liquid - 500mg (20ml) twice a day 5/7
  • Add thickener and administer eaten as food
  • if unable then, crush tablet and administer with puree

Co-amoxiclav 250mg/62mg/5ml liquid - 10ml three x a day 5/7
  • Add thickener
  • if unable then, crush tablet and administer with puree
Simvastatin tablets 40mg at night

- hold until Abx completed
- administer whole with puree/yogurt

Paracetamol 500mg/5ml liquid - 1000mg four times a day

- Can used if the patient is safe with stage 1 fluids (cough syrup consistency)
- If not appropriate, **crush tablet** and give with yogurt
To crush or not to crush?

Knowledge of food textures can allow some tablets or capsules to be administered whole, rather than crushed tablets or opened capsules, within a particular texture of food.

This is always preferable from both legal, pharmaceutical and administration perspective.
What about the law?

* When products are used outside their licence (e.g. crushing non-crushable tablets) a greater liability rests with the individual prescriber, dispenser and/or person responsible for the provision or administration of the medication.
Liability can be minimized by:

- **Clear documentation** of the reason for altering the medicine

- Following evidence-based, safe, effective practice

- Obtaining consent from the patient (in England and Wales, doctors may act in a patient’s best interest if the patient is incapable of providing consent [in accordance with the Mental Capacity Act 2005]; in Scotland, doctors must act according to requirements of Part 5 of the Adults with Incapacity [Scotland] Act 2000)
Support for this process

Supporting patients with swallowing difficulties: Medicines and dysphagia

Flow chart for managing medicines in patients with dysphagia

1. General Principles
   - Swallowing difficulty identified:
   - Liaise with Speech and Language Department

2. SLT recommend Modified diet and fluids
3. SLT recommend Water protocol WITH ORAL DIET
4. SLT recommend Water protocol only or Nil By Mouth

This flow chart provides a simple method of determining the stage of swallowing for individual patients and for the corresponding manipulation of formulation to allow for the safe and most effective administration of medication.
Pharmacist’s role in supporting patients with dysphagia: the FLUID plan

- Find out how the patient swallowed food and medication prior to admission
- Look at the patient’s dysphagia treatment plan and current medication list
- Undertake medication review and recommend alternative methods of administration, dosage forms, or change medication
- Instruct patient, family member and/or inpatient nurse on methods of administration in hospital and/or at home
- Document in patient record and ensure transfer information to next sector of care

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Cover Story

Dysphagia and medicines: How to tailor medication formulations for patients with dysphagia

http://www.pharmaceutical-journal.com/learning/learning-article/how-to-tailor-medication-formulations-for-patients-with-dysphagia/20201498.article