

Medication management of adults with swallowing difficulties

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Identifying patients with swallowing difficulties

Improved communication

- Healthcare providers should always ask the patient or carer whether they have difficulty swallowing medication, and assess the reasons for this
- Doctors should ensure that known swallowing difficulties are taken into consideration when prescribing medication
- Community pharmacists should assess the suitability of medication formulations for individual patients, and report swallowing difficulties to the prescriber
- Carers should inform the patient's doctor if they know or suspect that swallowing medication is an issue

Clinical evaluation

- The causes of swallowing difficulties are numerous, manifesting as mechanical obstruction, or affecting the muscles or nerves involved in swallowing
- Consider individual investigation and management in the following conditions:
 - neurological conditions (e.g. stroke, progressive neurological disease)
 - cancer (e.g. head, neck, oesophageal cancer)
 - cardiac and respiratory disease
 - physical/learning disabilities

- Symptoms and signs indicating that an individual may experience difficulty swallowing medication include:
 - difficult or painful chewing or swallowing
 - dry mouth (xerostomia)
 - difficulty controlling food or liquid in the mouth
 - coughing/choking before, during or after swallowing
 - hoarse/wet voice quality
 - feeling of obstruction (e.g. globus sensation)
 - unexplained weight loss
 - regurgitation of undigested food
 - recurrent chest infections (resulting from aspiration)
- Specialist assessment (e.g. speech and language therapy, gastroenterology) is required for patients with any clinical condition that may require them to take liquid nutritional supplements or receive medicines by enteral feed tubes
- Oral medication usage may also be complicated in patients with psychological conditions, such as:
 - learning disability
 - severe mental illness
 - dementia
- In certain individuals, there may be a personal preference against taking certain medicines

Management

Management of patients with evidence of swallowing difficulty

- The following algorithm assumes that the patient has been assessed thoroughly, and non-adherence to medication due to a problem with the administration routine has been ruled out

Alternative routes of administration

- Check with pharmacist and/or Medicines Information Centre to ascertain whether

alternative formulations of the medication in question are available, for example:

- transdermal
- buccal
- intranasal
- parenteral/injectable
- rectal
- sublingual

- If a suitable formulation is not available:
 - for patients who are not able to take medicines orally:
 - consider prescribing an alternative medicine or discontinuing the treatment
 - for patients able to take medicines orally:
 - consider prescribing an alternative medication
 - if no alternative exists, altering a solid-dose oral formulation may need to be contemplated (see below)

Switching to liquid or dispersible oral formulations

- Changing the formulation of a product may alter its bioavailability, efficacy and/or side-effect profile
 - do not assume that the dose of a liquid/dispersible formulation will be the same as the solid oral form of a particular product; check dose equivalence
 - when switching from a sustained-release to a standard-release form of a medicine, dose frequency will need to be adjusted accordingly
 - evaluate efficacy and side effects frequently
- Dispersible tablets may not give an even solution so part dosing is potentially inaccurate
- Some medicines are available as non-licensed liquid 'specials' or extemporaneous preparations, which are formulated to meet the requirements of a doctor for specific use by an individual patient
 - dose uniformity or reproducibility may not have been tested for extemporaneous preparations, or some 'specials'
 - to minimize the variability of supply, the product specification should be documented: the formulation, method of preparation, and strength should be noted

- For a comprehensive list of products available in liquid or dispersible form, see www.swallowingdifficulties.com

Continuity of care

- To ensure continuity of care, e.g. for patients moving from secondary to primary care:
 - any changes to a dosage formulation should be noted, and this information clearly communicated on to subsequent prescribers and other healthcare professionals
 - swapping between liquid formulations, particularly liquid 'specials' (which do not have bioavailability data), should be avoided

Altering a solid-dose oral medication

- Altering a solid-dose formulation should be reserved as last-resort and practised only after appropriate advice has been sought from a pharmacist and/or Medicines Information Centre
- Certain types of drug should never be altered without advice from a pharmacist and/or the manufacturers due to the changes these actions impose on the pharmacokinetics and pharmacodynamics of the drug; these include the following types:
 - modified release
 - enteric coated
 - hormonal, cytotoxic or steroidal
 - film and sugar coated
- The outcome of such pharmacological changes can be accentuated in older people due to age-related differences in pharmacokinetics
- Prescribers should also consider:
 - how stable the product is once opened to the environment
 - whether the safety of the person preparing or administering the product would be put at risk
 - alteration of a solid-dose oral formulation should be considered under Control of Substances Hazardous to Health (COSHH) regulations since there may be an increased exposure to chemical components
 - the person may have a hypersensitivity to the product or its constituents

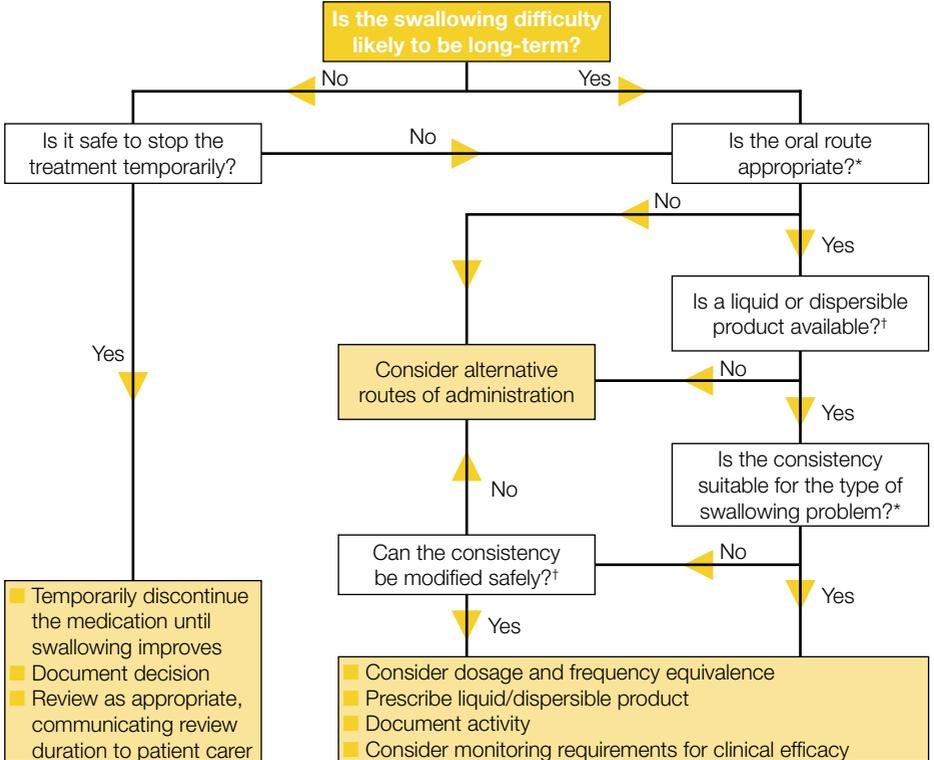
- whether the dose preparation could be accurately repeated
- the amount and type of diluent and/or thickening agents that would be used
- whether the results would be unpalatable

- Variation in the amount of drug reaching the system due to formulation change

may impact efficacy and the potential for side effects, particularly in drugs with a small therapeutic window including:

- phenytoin
- digoxin
- carbamazepine
- theophylline
- sodium valproate

Algorithm for the medication management of adults with swallowing difficulties



Seek advice from:

* Speech and language therapist +/- occupational therapist, physiotherapist, dietician (if involved in dysphagia management)

† Supplying pharmacist and/or Medicines Information Centre

about this working party guideline...

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further information -

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