Facing the challenge of off-licence drug administration in patients with dysphagia

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Introduction

Patients with dysphagia are prone to more medication administration errors than those with normal swallowing ability.[1]

A 53 residents with dysphagia (28%) are cared for in a 192 bed nursing care home for the elderly on a hospital site in Vienna. In the majority of cases the formulation of their oral medications has to be modified prior to administration.

This method of drug administration usually falls outside the terms of the drug's product licence. Various risks are associated with this practice and can result in adverse outcomes for patient and staff.[2]

Aim

To raise health care professionals' (HCPs) awareness for the issues related to this off-licensed drug administration method and to minimise associated risks

Objectives

- To train HCPs safe and effective administration of drugs to residents with dysphagia and highlight associated issues
- To identify current practice
- To update the medication list of recommendations for crushing and dispersing solid oral forms and their administration via enteral feeding tubes
- To identify the residents who cannot swallow whole tablets
- To introduce a pharmacy medication check service to give advice on appropriate dosage forms and safe drug administration in this patient group

Methods

A presentation for HCPs on drug administration to patients with dysphagia was given. After the presentation a non disguised questionnaire consisting of 16 questions was used. Fourteen closed-ended questions, one open-ended question and one question using a rating scale from one to five were asked. The data obtained were analysed quantitatively.

A designed form and the drug charts were used to collect data on residents with dysphagia. A pharmacist evaluated the appropriateness to manipulate the prescribed medications based on most up-to-date evidence. Administration and prescribing advice were given through a medication check service to HCPs.

Results

A total of 54 HCPs (88% nurses) attended the presentation and 50 questionnaires were returned resulting in a response rate of 93%. A 84% of these HCPs administer drugs and for 80% it's a relevant topic. Two third of HCPs need 1-3 hours daily for drug administration to dysphagia patients. The majority of answers showed that risks like cross-contamination, treatment failure and adverse drug reactions due to pharmacokinetic changes were identified in current clinical practice.

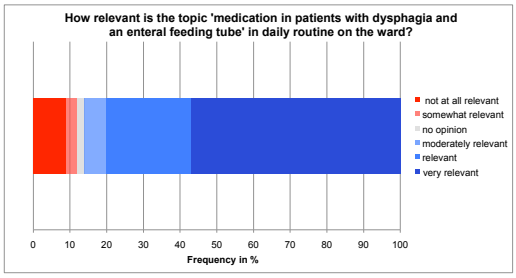

Figure 1 Opinion of Health Care Professionals (HCPs) on relevance of topic

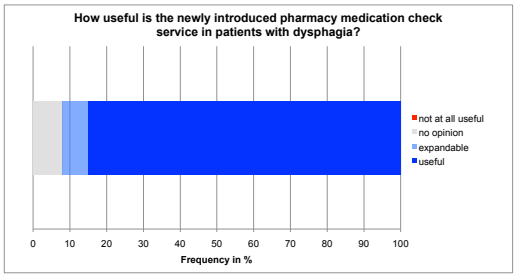

Figure 2 Opinion of HCPs on medication check service

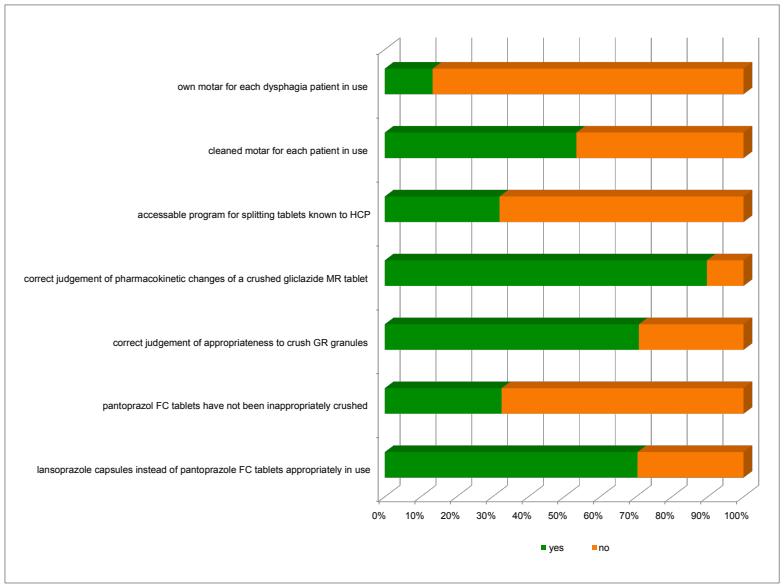

Figure 3 Identified risks in current clinical practice after evaluation of questionnaires
HCP Health Care Professional MR modified release GR gastro-resistant FC film-coated

Specific administration advice for HCPs was given for 148 of 443 (33%) prescribed medications via the pharmacy medication check service. 26 medications had to be changed to an alternative and for 13 medications a more appropriate formulation was recommended.

Conclusion

This project shows that there was need to improve the drug management of patients with dysphagia. The HCPs welcomed the presentation on this topic and the introduction of a pharmacy medication check service to support them with administration advice and to minimise risk for patients.

References

[1] Kelly J, Wright D, Wood J. Medication errors in patients with dysphagia. Nursing Times 2012; 108:21,12-14
[2] Mercovich N, Kyle GJ, Naunton M. Safe to crush? A pilot study into solid dosage form modification in aged care. Australasian Journal on Ageing 2013; doi: 10.111/ajag.12037