

IMPROVING ORAL DRUG ADMINISTRATION IN PATIENTS WITH SWALLOWING PROBLEMS AND FEEDING TUBES

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INTRODUCTION

Correct administration of oral drugs in patients with swallowing problems and feeding tubes remains a challenge. Information regarding this route of administration is very scarce and also associated with reduced efficacy, increased toxicity and increased risk of tube obstruction due to an inadequate administration method.

AIM

To improve medication safety by developing a database, containing information on safe handling and administration of drugs in patients with swallowing problems and feeding tubes.

METHODS

To identify the issues and specific needs considering the administration of oral drugs in patients with swallowing problems and feeding tubes, the Royal Dutch Pharmacists Association (KNMP) initiated a working group. The working group, consisting of community and hospital pharmacists, a pharmacy assistant, a nurse and a dietician, identified the issues and specific needs considering the administration of oral drugs in patients with swallowing problems and feeding tubes.

Several local initiatives had already taken form, but there was a need for a more centralized approach. The KNMP initiated a project for a central database with practical advice and recommendations that can be consulted by all healthcare professionals in hospitals and nursing facilities. Interviews were held to make a selection of information needed for the database.

RESULTS

The working group identified several issues and specific needs considering the administration of oral drugs in patients with swallowing problems and feeding tubes (table 1). These subjects were the basis of the information contained within the individual monographs in the central database.

Table 1: Subjects in the individual drug monographs

- Information about handling or manipulation of the drug
- Pharmaceutical alternatives
- Therapeutical alternatives
- Enteral tube administration
- Food interactions
- Interaction tubing material
- Site of drug delivery
- Background information on the active substance for (hospital) pharmacists
- Health and safety

As a result a database was created, www.oralia.nl, with over 600 individual monographs containing practical advice and recommendations for safe drug administration in patients with swallowing problems and feeding tubes. The database is designed for all healthcare professionals, to provide all the available information in one resource with practical advice and recommendations for the safe handling and administration of drugs via enteral feeding tubes.

The most commonly used drugs in the Netherlands for, among others, the general population, children and the elderly were selected. The content of the individual monographs is mainly based on available product information, information supplied by drug companies, scientific publications and practical research.

The individual monographs contain guidance on the safe handling of specific drugs and formulations (figure 1). Wherever possible, a licensed formulation route should always be used, and the monographs point the user to alternative routes and drugs for consideration. Where alternative routes/formulations are not available, the monographs make recommendations for safe handling of the drug, including instructional video (figure 2).

CONCLUSIONS

Due to this study a database was developed which provides appropriate drug information with practical advice and recommendations for healthcare professionals like pharmacists and nurses. This can help to prevent or reduce medication errors and improve the medication safety, when handling and administering drugs to patients with swallowing problems and feeding tubes.

Figure 1: Example of a drug monograph

The screenshot shows the Oralia.nl website interface. At the top, there is a navigation bar with the KNMP logo and links for 'About oralia.nl', 'Contact', and 'KNMP2 Logout'. Below the navigation bar, there is a search bar with 'metformine' entered and a 'To search' button. The main content area is titled 'Metformin film-coated tablet 500-1000 mg'. Underneath, there is a section for 'Metformin' and 'Editing Information'. A tabbed interface shows 'Alternatives', 'swallowing problems', and 'Probe'. The 'swallowing problems' tab is active, displaying 'Suitable method(s)'. The text under this section describes various methods: 'Disintegrate tablet in water', 'Disintegrate in a syringe', 'Crushing with a tablet crusher', and 'Crushing in mortar'. To the right, there is a table titled 'Trade products in this group' with columns for 'trade product' and 'breakline'. The table lists several Metformin products and their breakline status.

Figure 2: Example of instructional video

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For www.oralia.nl, scan the QR-code.
Please note that the website is in Dutch.

Username: FIP-Sevilla
Password: 20092022

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ROYAL DUTCH PHARMACISTS ASSOCIATION