Role of the hospital pharmacist in the management of drugs not adapted to patients with dysphagia

**PURPOSE.** To analyze the drugs most frequently prescribed requiring manipulation in patients with swallowing difficulties. And of these, which are not suitable for use in this manner (enteric coats, small therapeutic windows, slow release, etc).

**METHODS**
A prospective longitudinal study was performed (2 months) in the internal medical unit. Pharmacotherapy prescribed to inpatients with dysphagia was evaluated using a CPOE program. Data collected were: age, drugs requiring manipulation, and if manipulation was possible. To avoid medicine administration errors (MAEs), pharmacist performed interventions to the nurse and/or prescriber. Acceptance or rejection of the intervention was measured.

**RESULTS**
Pharmacotherapy of 54 inpatients was analyzed (median age: 82).

Each patient → 12 different drugs on the average → 77% of oral drugs were not in an appropriate dosage form

The pharmacist performed a total of 82 interventions

48 of them involved drugs that could be crushed/dispersed but had alternatives that the physician could switch (liquid or dispersible oral forms) or required precautions associated with manipulation by the nurse.

→ All interventions were accepted
→ Drugs most frequently involved were:

- Acenocoumarol with 5 interventions;
- Levodopa/carbidopa with 4; enalapril, pregabalin, risperidone and digoxin with 3; omeprazole, silodosin, amlodipine, duloxetine and atenolol with 2.

Pharmacist detected 22 different MAEs, and to avoid them, 34 interventions were performed:

→ 15 to the physician (involving drugs not suitable for manipulation), recommended switching to an alternative (67% interventions accepted).
→ 19 to nurses due to incorrect manipulation (37% accepted).
→ Drugs involved were:

- Pantoprazole with 8 interventions, acetylsalicylic acid and dutasteride/tamsulosin with 3, spironolactone with 2 and other drugs with 1.

**CONCLUSIONS**
Most of the oral medication prescribed to patients with dysphagia was manipulated, which can promote MAEs. The increased MAE rate in these patients means that health professionals need to take extra care when prescribing and administering drugs to these patients. Hospital pharmacists should assess the suitability of medication formulations and discuss swallowing difficulties to the prescriber.