Practice sting Long-term daily use of weekly doses

This Practice Sting is particularly interesting for pharmacists and pharmacy assistants

When a pharmacist uses automatic repeating, such as with an individualized distribution form (GDV, medication roll) or repeat service, an error can go unnoticed for a long time. For example, changes in daily and weekly doses go unnoticed for a long time, as the notifications below show.

Notifications

1. A patient has been taking one alendronic acid 10 mg tablet daily for some time for treatment of osteoporosis. The alendronic acid is delivered in a weekly medication roll. Due to supply problems, the pharmacist decides to change this treatment to one tablet of alendronic acid 70 mg once a week. When processing this conversion in the roll, the pharmacy assistant forgets to adjust the use. The roll therefore contains one tablet of alendronic acid 70 mg per day. Both the second pharmacy assistant who checks the roll changes and the pharmacist who checks the prescriptions do not notice the error. The second roll that the patient receives also contains one tablet of alendronic acid 70 mg every day. The excessively high dose of alendronic acid leads to serious esophageal complaints. After a week and a half, the patient was admitted to the hospital for these esophageal complaints.

2. When starting a 'Baxter', the weekly strength risedronic acid 35 mg daily was introduced. This only was discovered after 3 months, during the quarterly audit.

Analysis

VMI regularly receives notifications of medication incidents in which patients receive a weekly dose of an oral medicine every day. In addition to incidents with bisphosphonates, there are similar mix-ups with methotrexate, among other things. In contrast to the bisphosphonates, this last medicine has different indications with large differences in dosages. This makes automated dosage control for this medicine difficult to achieve. To prevent serious incidents with methotrexate, users of most pharmacy information systems receive the signal 'Beware of toxicity: extra check' when prescribing this medicine.
Automated dosage control is quite possible with the bisphosphonates alendronic acid and risedronic acid. The prescriber and the pharmacist always receive a signal when a weekly dose is prescribed or delivered daily. It is not known why the pharmacy assistants in both notifications did not take action when they made this error during prescription processing.
The reason why it takes so long before the error is noticed is because the pharmacist has the option to suppress medication monitoring signals once they have been resolved. This prevents signal fatigue in the pharmacy and makes the pharmacy process more efficient. With an automatic repeat such as Central Filling (CF), repeat service and GDV, incorrect handling, as the notifications show, can have long lasting effects. Only at a check point, once a quarter for example or after questions or complaints from the patient, a dosing error does come to light.

Recommendations

For pharmacists

- Draw up a policy for suppressing medication monitoring signals for a longer period of time, in accordance with the KNMP guidelines for Care for patients with medicines in an individualized distribution form and Medication Monitoring.
- As a pharmacist, check the prescriptions before sending the file to the CF or GDV pharmacy.

For pharmacists and pharmacy assistants

- Also check the correct entry for times and days for recipes in GDV. Be extra alert with medicines that are usually used weekly.
- When writing, filling and delivering, check whether the strength and dosage on the labels correspond to the strength and dosage on the prescription.