



## Practice sting 2022-20

### Practice sting Overdoses due to delivery problems of methotrexate

**This practice sting is particularly interesting for pharmacists**

VMI has recently seen an increase in incident reports about methotrexate. Misuse of methotrexate is notorious for its sometimes life-threatening risks. The recent reports are a result of conversions because some strengths are not available. Despite extensive explanation to the patient, this leads to incidents as shown by the reports hereafter.

#### Notifications

##### **Notification 1 and 2**

In both reports from different pharmacies, the dose of eight tablets of methotrexate 2.5 mg once a week was changed to two tablets of methotrexate 10 mg once a week, because the methotrexate 2.5 mg tablets are not available. Despite extensive instruction, patients take eight tablets of methotrexate 10 mg in one sitting. This is found out when they come to the pharmacy way too early for a repeat prescription. Fortunately, both patients recover without serious side effects.

##### **Notification 3**

A woman takes 10 tablets of methotrexate 2.5 mg once a week. Because the 2.5 mg tablets are not available, the pharmacist changes the prescription to two and a half tablets of 10 mg once a week. The pharmacist clearly explains that the woman now has to take 2.5 tablets once a week because the 2.5 mg methotrexate tablets are not available. The woman who is used to taking ten tablets, still takes ten tablets of 10 mg in one go at home. After contact with the rheumatologist, the woman does not need to be treated for the toxic effects of the too high dose of methotrexate.

##### **Notification 4**

A man takes 15 mg of methotrexate once a week. He is given two tablets of 2.5 mg and one tablet of 10 mg. The 10 mg tablet has a different shape than the 2.5 mg tablet and the 10 mg tablet is also larger. Due to delivery problems of both the 10 mg and 2.5 mg tablets, the pharmacist is forced to supply a different brand. As a result, both strengths have the same shape and now the 10 mg tablet is smaller than the 2.5 mg tablet. After some time, the 'old' 10 mg tablets are available again. The man again receives the tablets that differ in shape and of which the 10 mg tablet is larger than the 2.5 mg tablet. This makes the man insecure and he goes back to the pharmacy.

#### Analysis

Although methotrexate causes mild symptoms after a single overdose, the damage can be more serious after repeated use of too high doses. Practice shows that the conversion of strengths does not always go smoothly in patients who have been taking a medicine in a fixed way for some time. Not even if proper information and explanations have been given.

#### Recommendations

- Let the patient tell in his own words how the use of methotrexate will change and check in this way whether the message has been understood.
- After a week, contact the patient with a high-risk conversion. Ask open questions. A yes/no question is not suitable.
- Be extra alert to early repetitions.
- Preferably do not combine both strengths, but use one strength.