Practice sting Serious consequences of medicine shortages

This Practice Sting is particularly interesting for pharmacy teams

Due to medicine shortages, pharmacists and pharmacy assistants increasingly have to switch prescribed medicines to a different strength of the medicine. The following notifications show that this does not always go well and can lead to major consequences for the patient.

Notification

1. During a telephone consultation, a patient tells her internist that she has recently been suffering from too low blood glucose levels. This started after she received insulin Humalog kwikpen 100 IU/ml from the pharmacy because the 200 IU/ml kwikpen was not available. When handing over the pen, the pharmacy assistant told the patient that she had to inject double the amount of insulin. The internist tells the patient that she should start using the old amount again and informs the pharmacist that the advice was incorrect.
2. A patient has been using insulin Humalog kwikpen 200 IU/ml for some time. Due to supply problems, the pharmacy assistant converted the Humalog kwikpen 200 IU/ml to the Humalog kwikpen 100 IU/ml. When dispensing the insulin, the pharmacy assistant tells the patient that the concentration of insulin in the 100 IU/ml pen is half of the concentration in the 200 IU/ml pen and that the pen will therefore be empty sooner. The patient interprets this as meaning that she needs to inject double the amount. The patient injected too much insulin for a month. This caused her to have hypos and convulsions.

Analysis

Some medicines are available in multiple strengths. If a strength is (temporarily) unavailable, the patient can be switched to the same medicine in a different strength. However, this may have consequences for the amount of medicine that the patient must use at a time. Various situations can be distinguished. Examples:

- Drink with x mg/ml is not available. The dosage of the drink is in milliliters. The double strength drink (i.e. 2x mg/ml) is available. The patient should halve the amount of milliliters of drink that must be taken at a time.
- Insulin pen of x IU/ml is not available. The patient injects y IU at a time. The patient turns the pen until seeing y IE appear in the window. This does not differ when supplying a pen with a different concentration of the same insulin. However, when a pen with a higher concentration of insulin is supplied, the patient will have to turn less to dose the correct amount of insulin.

It follows from the explanation in example 2 that the pharmacy assistant in notification 1 makes a mistake. The assistant should not have told the patient that she had to inject double the amount of insulin. The assistant should have told the patient that the dose would remain the same, but that the patient would have to rotate more when adjusting the dose. In notification 2, the pharmacy assistant does not make this error. Only the explanation given by the assistant when delivering the pen is not clear to the patient. The patient interprets the pen being empty earlier as meaning that she needs to inject double the amount.

Recommendations

For pharmacy teams

- Discuss this Practice Sting in your pharmacy team.

- Report medication incidents where an error was made when switching to another medicine to VMI. VMI feeds back these errors to the field, so that other pharmacy teams do not make the same mistakes.