



Practice sting 2021-25

Practice sting Difficulties with substitution with gliclazide modified release tablets

Due to availability issues, gliclazide modified-release tablets (mga) are sometimes substituted in pharmacies and nursing wards. Substitution can be difficult, as the following notifications show.

Notifications

As of January 1, 2018, VMI received five reports from nurses and pharmacy assistants about incorrect substitution between gliclazide 30 mg mga tablets and 80 mg mga gliclazide tablets. Four reports concern undertreatment with gliclazide. For example, because a nurse gives a patient who usually takes 4 tablets of gliclazide 30 mga with breakfast, one and a half tablets of gliclazide 80 mg mga. In one report serious overtreatment occurred because the patient was given 3 tablets of gliclazide 30 mg mga as an alternative to 1 tablet of gliclazide 80 mg mga.

Analysis

Gliclazide is available in two types of modified-release tablets: long-acting with a strength of 30 mg or 60 mg and medium-acting with a strength of 80 mg. Despite the difference in milligrams, a 30 mg mga tablet is as effective as an 80 mg mga tablet. A 30 mg mga tablet gives a comparable decrease in fasting blood glucose and HBA1c values as an 80 mg mga tablet. The reason for the comparable effectiveness is that the active substance in gliclazide 30 mg mga is stored in granules in a matrix, from which the gliclazide is released layer by layer. This provides a sustained release of gliclazide for absorption into the body. With the 80 mg mga tablet, the release is delayed because the gliclazide slowly dissolves from the tablet. The release from the 80 mg mga tablet is less complete and lasts shorter than with the 30 mg mga.

Substitution between the 30 mg and 80 mg tablets is only recommended in case of delivery problems and, according to the manufacturer, monitoring of blood glucose levels is always necessary. It is important to explain to the patient that the 30 mg mga and the 80 mg mga tablets have comparable effectiveness when substituted.

Recommendations

For formulary authors

- Clearly indicate that one tablet of gliclazide 30 mg mga has a similar effect compared to one tablet of gliclazide 80 mg mga and that substitution should only occur while checking blood glucose levels.

For prescribers

- Only switch from one type of gliclazide to another if availability issues are present.
- After substitution, monitor whether the patient remains properly adjusted.

For nurses

- Never substitute gliclazide on your own initiative. Always contact the pharmacist.

For pharmacists

- Be alert if one type of gliclazide has to be replaced by another due to supply problems. Make sure that blood glucose levels are properly monitored.
- Be alert if the prescriber switches from one type of gliclazide to another when prescribing.
- Provide a clear explanation to the patient when substituting from 80 mg mga to 30 mg mga and vice versa.

For administrators of drug databases and providers of information systems for physicians and pharmacists

- Display a warning signal for gliclazide tablets indicating that the 80 mg mga tablets and the 30 or 60 mg mga tablets cannot be substituted on a one-to-one basis on the number of milligrams.