

Publication

Methotrexate intoxication : the Pharmaceutical Care process reveals a critical error

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What is known and objectives: Intoxication with oral low-dose methotrexate (MTX) is a well-known and frequent problem, which is often discovered accidentally. The major reason is error in the frequency of dosing, mostly of daily instead of weekly intake. We report a case where the critical error was discovered by the community pharmacist during the routine implementation of the Pharmaceutical Care process SOAP while dispensing a new prescription for the patient. Details of the case: A 78-year-old widow went to her regular community pharmacy to pick up a prescription for oral mucositis. The evaluation of the case by the pharmacist using the SOAP (an acronym for Subjective, Objective, Assessment and Plan) note method revealed the underlying oral low-dose MTX intoxication which led to hospitalization a few days later. The incorrect interpretation of the required dose had arisen from the written instructions for use and led to the erroneous intake of MTX daily (instead of weekly). We interviewed the patient at her home 2 months after discharge. She explained that her continued intake of MTX in spite of manifest adverse effects was because of a profound conviction that she was doing right. Her confidence in physicians remained unchanged after the incident, but she would now refuse to take MTX. What is new and conclusion: The reasons for the intoxication were not discovered accidentally but by the routine use of the Pharmaceutical Care process SOAP by the community pharmacist. We describe three main errors that might have been avoided and provide solutions for physicians, pharmacists, manufacturers and patients, to reduce such risks. Our case highlights the dangers of teleconsultation, the crucial role of Pharmaceutical Care provided by community pharmacists and the continued need to supply advice to patients being prescribed low-dose MTX. The fact that a patient has had a previous and successful experience with a similar treatment should not deter health professionals from verifying a patient's understanding via questions and feedback.

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