Controversies in drug safety

Creative improvements won't break the bank

"A 78-year-old man, who was receiving donepezil for dementia, developed paralytic ileus after donepezil was discontinued. The man, who had started receiving donepezil 5 mg/day about 3 years previously, was admitted… he discontinued his donepezil after admission. Three days later, he complained of abdominal distention, pain, and constipation. A radiograph revealed significant gas retention in his small and large intestines. The man's gas retention persisted for 1 week… donepezil was restarted, and he experienced immediate and dramatic improvement of his clinical symptoms."[1,2]

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Adverse drug reactions (ADRs) are the second-most common form of injury caused by medical care in Canadian acute care hospitals.[3] System-wide improvements, such as computerized physician order entry (CPOE) and medication reconciliation, are underway. While awaiting their complex and costly implementation, consider these actions that can be taken now by individual clinicians:

1. Expect the unexpected

This case of paralytic ileus induced by donepezil withdrawal is the first published report of this ADR,[2] illustrating that we have limited knowledge of the toxicity of most drugs. If you observe an unusual reaction in an individual patient, a simple tool such as the WHO causality algorithm can help you assess the causal association.[4] This algorithm considers the timing of the reaction in relation to when the drug was initiated (noting that some ADRs can occur after a patient has taken a drug for months); other explanations; dechallenge and rechallenge. In the donepezil case above, the timing and the positive dechallenge suggest a probable causal association.

2. Monitor

Inadequate monitoring is a frequent cause of preventable or ameliorable ADRs, from inadequate laboratory monitoring, or failure to act on signs and symptoms of drug toxicity.[5-7] In a recent study, 50% of patients taking continuous digoxin and 59% taking theophylline lacked drug level monitoring over a 1-year period.[8] Put a schedule on the chart for repeat blood work; have a nurse or pharmacist follow up new prescriptions; note and act upon symptoms.

3. Document

Only 1% of ADRs were documented appropriately in the charts of a highly computerized hospital in a recent study.[9] For the patient in the donepezil case above, suspected ADR information should be clearly summarized in the medical record, documented for future hospitalizations, and communicated to those looking after him in the community, to help avoid similar ADRs in the future. A short description of the ADR, photocopied for the patient or caregiver and faxed to his other health care providers, may suffice. Every medication history should include ADRs.

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References

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