ASK A PHARMACIST

Less common medications for pain, nausea, and vomiting

I see more patients being prescribed methadone (Dolophine, Methadose, generics) for pain. How is methadone different from other opioids, and what special precautions should I be aware of?

— Kerstin L. McSteen, BSN, MSN, ACHPN, CNS-BC, Minneapolis, MN

Use of methadone for cancer pain is becoming more common because of its low cost, availability in an oral formulation, and long duration of action. Methadone is a synthetic opioid that has activity at multiple receptors in addition to the opiate receptor. This provides some of methadone's additional benefits, such as incomplete cross-tolerance with other opioids and benefit in neuropathic pain. The potency of methadone relative to other opioids varies significantly between patients and is affected by any previous opioid dose, so methadone should be prescribed by providers experienced in pain management.

Methadone metabolism is very extensive compared with other opioids, and this agent has a long and variable half-life: 12 to 100-plus hours compared with 2 to 4 hours for morphine). Because of extensive metabolism and accumulation in body tissue, methadone has a prolonged titration period compared with other opioids. A too-short titration period can result in toxicity when methadone accumulates. Respiratory depression, especially during the titration period, is a black box warning and may persist longer than analgesic effects.

Methadone also has black box warnings for QT prolongation, so it should be used with caution in patients who take other QT-prolonging medications or who have electrolyte abnormalities. A baseline ECG should be considered in patients starting methadone, especially if they have other risk factors for torsade de pointes.

Because of its extensive metabolism, methadone has many drug interactions and should be avoided in patients with severe liver disease. Patients with an estimated creatinine clearance of less than 10 mL/min should receive lower doses. Patients may express concern about social stigma with methadone. The benefits of methadone in treatment of chronic pain—not its use in treatment of addiction—should be emphasized.

I've noticed that the clinicians on the palliative care service in our hospital often order olanzapine (Zyprexa) for nausea and vomiting. Isn't this an antipsychotic?

— Kerstin L. McSteen, BSN, MSN, ACHPN, CNS-BC, Minneapolis, MN

You're right: Olanzapine is an atypical antipsychotic used to treat schizophrenia and bipolar disorder. The agent binds to dopamine, serotonin, alpha, histamine, and muscarinic receptors in the CNS, resulting in some efficacy as an antiemetic. Multiple small studies have shown that olanzapine is useful for refractory nausea in the palliative care setting and may be useful for prevention of delayed chemotherapy-induced nausea and vomiting.

In addition to addressing any concerns patients may have about taking an antipsychotic, the clinician should be aware of common adverse effects. These include somnolence, postural hypotension, constipation, dizziness, restlessness, weight gain (approximately 2.5 kg), increased appetite, and reduced seizure threshold. Olanzapine has a black box warning for increased mortality in elderly patients being treated for dementia-related psychosis, and long-term use of olanzapine is associated with development of hyperlipidemia and hyperglycemia.

> Olanzapine is useful for refractory nausea in the palliative care setting.

Olanzapine is available in oral and long-acting IM formulations, but only the oral product has been studied for nausea and vomiting. A commonly used dosage is 5 mg orally every 12 hours, although you may see lower or higher doses. ■

To ask our oncology pharmacist a question, please e-mail editor.ona@haymarketmedia.com.

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