Opioid Rotation: Convert Tx With Safety-Focused Approach

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DESTIN, FLA. – Opioid rotation is a common and potentially beneficial practice for helping to relieve chronic pain in patients who require ongoing opioid therapy, but there are very few data to guide best practice.

The recommended approach, therefore, is one that focuses on safety, according to Dr. Perry Fine. Clinicians should consider opioid rotation when patients on chronic opioid therapy experience intolerable adverse effects, or when benefits are inadequate despite dose increases, according to recently published clinical guidelines (J. Pain 2009;10:113-30).

However, it is important to consider a number of factors before making changes in treatment, including demographic, disease-related, and treatment-related factors, as well as comorbidities, concomitant pharmacotherapy, drug sensitivities, and social situation, said Dr. Fine, professor of anesthesiology at the University of Utah, Salt Lake City.

If a decision is made to convert a patient’s treatment, a two-step, safety-focused approach is needed, he said. Step 1 involves an “automated safety factor” calculation. That is, the equianalgesic dose of the new opioid should be calculated via an equianalgesic table such as a mu-agonist dose chart, and, with a few exceptions, an automatic dose reduction of 25%-50% should be made, except if the new drug is methadone or transdermal fentanyl.

A 25% reduction for opioids (other than methadone or fentanyl) is adequate in patients with no risk factors and/or if the switch is to a different route of administration of the same drug. A 50% reduction is needed in those receiving a relatively high dose of the current opioid, those who are elderly or frail, and those of Chinese lineage, Dr. Fine said.

If the switch is to methadone, a 75%-90% dose reduction is needed, and if the switch is to transdermal fentanyl, use the reduction that is built into the conversion charts provided in the prescribing information. If an oral transmucosal fentanyl citrate formulation is used, start with the lowest dose, he advised.

The second conversion step involves patient-specific adjustments. The patient should be assessed for pain severity and other medical or psychosocial characteristics, and appropriate additional adjustments should be made to the initial dose of the new opioid.

In patients with specific vulnerabilities such as advanced age, renal insufficiency, or cognitive impairment, consider an additional 10%-30% dose reduction, he said.

Dr. Fine has served as an advisory board member for Ameritox, Coviden, King (now Pfizer), Meda, and Purdue-Pharma. He also is a consultant for Cephalon and Johnson & Johnson.

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**Examples of Initial Dose Calculation**

- **To convert controlled-release oxycodone (60 mg oral dose twice daily) to controlled-release morphine:**
  1. Calculate the total oxycodone 24-hour dose (120 mg).
  2. Determine morphine equivalency (20 mg oxycodone = 30 mg morphine).
  3. Convert the 24-hour oxycodone dose to the morphine dose (120 mg oxycodone = 180 mg morphine).
  4. Reduce the morphine dose by 25% (135 mg morphine).

- **5. Split the total morphine dose to the twice-daily dose (67.5 mg).** Because the controlled-release (extended-release) morphine is not provided in this exact dose, give the closest available dose (60 mg, twice daily).

- **To convert controlled-release morphine (30 mg oral dose twice daily) to transdermal fentanyl:**
  1. Calculate the total morphine 24-hour dose (60 mg).
  2. Use the prescribing info. to determine the oral equivalent dose of transdermal fentanyl (60 mg oral morphine = 25 mcg/hr fentanyl patch).
  3. Prescribe 25 mcg/hr transdermal fentanyl patch to be changed every 3 days. Supply patient with five patches (a 15-day supply); instruct patient on application, and follow up by phone or in office within 2-3 days.
  4. **To convert methadone (20 mg oral dose three times daily) to extended-release oxymorphone:**
    1. Calculate the total methadone 24-hour dose (60 mg daily).
    2. Use mu-agonist dose chart to calculate oxymorphone dose equivalency to methadone (5 mg methadone = 10 mg oxymorphone).
    3. Convert the 24-hour methadone dose to oxymorphone dose (60 mg methadone = 120 mg oxymorphone).
    4. Reduce the dose by 50% and split the 30% total calculated oxymorphone dosage to a twice-daily dose. Prescribe oxymorphone every 12 hours.

Source: Dr. Fine