Opioid Dose Adjustments

Examples of Opioid Rotations and Dose Reduction Strategies

1. Opioid Rotation (Does NOT Apply to Methadone or Fentanyl)
   - When converting from a weak opioid analgesic to a stronger opioid, use the recommended initial doses of the new opioid
   - Consider augmenting with a non-opioid medication and discuss non-pharmacologic options (stretching, gentle activity, meditation, relaxation, application of heat/cold, and hobbies) during the opioid rotation process
   - For opioid rotations involving high dose or step wise rotation, consider discussing with advanced pain care provider

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<th><strong>Opioid Rotations: Steps for Converting One Opioid to Another</strong></th>
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<td>1. Determine the total 24 hour dose of the current opioid</td>
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<td>2. Calculate the equivalent dose of the new opioid</td>
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<td>3. Reduce the dose calculated in step 2, providing 50–67% of new opioid to account for the incomplete cross tolerance</td>
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<td>4. Consider the rescue opioid therapy during the conversion process (5–15% of target dose)</td>
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**Single-Step Rotation** *(Commonly Used Tapering Strategy)*

**Example:**
Patient X is on oxycodone SA 40 mg Q8hr and you would like to change the Veteran to morphine. (30 mg morphine = 15–20 mg oxycodone)

**Step 1.**
Oxycodone SA 40 mg Q8hr = 120 mg/day oxycodone SA

**Step 2.**
15 mg oxycodone/30 mg morphine = 120 mg oxycodone/x mg morphine
\[ x = \frac{120 \text{ mg oxycodone}}{15 \text{ mg morphine}} \]
\[ x = 240 \text{ mg morphine} \]

**Step 3.**
Due to incomplete cross tolerance, the starting dose of morphine should be 50–67% of the equianalgesic dose. Therefore, your goal dose of morphine would be 120–160 mg/day given in divided doses.

**Answer:**
- Stop oxycodone SA 40 mg Q8hr
- Start morphine SR 60 mg Q12hr

**Step 4. Determine Rescue Opioid Therapy Dose**
- If patient is already receiving a short acting agent for breakthrough pain continue this medication
- If no short acting agent is on profile start opioid at 5–15% of dose calculated in step 3

**Example:**
- Goal dose of morphine 120 mg/day
  120 x 0.05 = 6 mg; 120 x 0.15 = 18 mg
- Give morphine IR 15 mg BID PRN for breakthrough pain

**Step Wise Rotation** *(May Be Preferable When Rotating from Large Doses of Opioids)*

**Example:**
Patient X is on oxycodone SA 40 mg Q8hr and you would like to change the Veteran to morphine. (30 mg morphine = 15–20 mg oxycodone)

**Step 1.**
Oxycodone SA 40 mg Q8hr = 120 mg/day oxycodone SA

**Step 2.**
15 mg oxycodone/30 mg morphine = 120 mg oxycodone/x mg morphine
\[ x = \frac{120 \text{ mg oxycodone}}{15 \text{ mg morphine}} \]
\[ x = 240 \text{ mg morphine} \]

**Step 3.**
Due to incomplete cross tolerance, the starting dose of morphine should be 50–67% of the equianalgesic dose. Therefore, your goal dose of morphine would be 120-160 mg/day given in divided doses.

**Answer:**
*Adjust to Morphine/Oxycodone SA forms and frequency
*Inform the patient if they experience sluggishness or become drowsy to call the clinic immediately

**Day 1:** Reduce oxycodone SA by 10–30%; start morphine at initial doses used
  - Oxycodone SR 40 mg Q12hr
  - Start morphine SA 15 mg Q8hr

**Day 7:** Reduce oxycodone by 10-30%; Increase morphine by 10–30%
  - Oxycodone SA 20 mg Q8hr
  - Morphine SA 30 mg Q12hr

**Day 14:** Reduce oxycodone by 10-30%; Increase morphine by 10–30%
  - Oxycodone SA 20 mg Q12hr
  - Morphine SA 30 mg Q8hr

**Day 21:** Stop oxycodone and increase morphine based on patients function and pain
  - Stop oxycodone SA
  - Morphine SA 60 mg Q12hr (target goal)
2. Opioid Dosage Reductions and/or Discontinuation

- Opioid tapers should be individualized to the specific patient situation and care should be taken to engage and provide support to the patient throughout the process.
- Gradual dosage reduction (appropriate for most patients): reduce dose by 10–25% every 1–4 weeks, larger initial dose reductions (25–50%) can be used.
- Rapid dosage reduction (medically dangerous situations): Decrease dose every 1–7 days (see pocket cards for examples).
- Stop immediately (clear signs of unsafe or illegal behavior): Educate the patient about potential withdrawal and provide appropriate referrals.
- Opioid discontinuation: rotating to another opioid can be employed to assist and shorten the taper process.

**Example of an Opioid Rotation and Discontinuation**

Patient X is prescribed oxycodone SA 80 mg Q8hr. You must confirm the patient is taking this dose.
(morphine 30 mg = oxycodone 15–20 mg)

**Step 1. Determine Total 24 Hour Dose of Current Opioid**
Oxycodone SA 80 mg Q8hr = 240 mg oxycodone SA daily

**Step 2. Calculate the Equivalent Target Dose of New Opioid**
30 mg morphine/ 20 mg oxycodone = x mg morphine/ 240 mg oxycodone
x = [240 mg oxycodone (30 mg morphine)] / (20 mg oxycodone)]
x = 360 mg morphine
The morphine to oxycodone ratio of 30:20 was chosen to provide a slightly decreased dose following conversion, thus assisting with a faster discontinuation/taper schedule for this example.

**Step 3. Due to Incomplete Cross Tolerance, Starting Dose of Morphine Should Be 50-67% of the Equianalgesic Dose**
360 x 0.5 = 180 mg; 360 mg x 0.67 = 241 mg: Target Dose = 240 mg/day given in divided doses

**Step 4. Determine Rescue Opioid Therapy (ROT) Dose**
- 5–15% of the target dose: 240 x 0.05 = 12 mg
- Give morphine IR 15mg BID PRN; continue ROT throughout taper as medically appropriate

**Step 5. Initiate Taper for Discontinuation (Morphine SR 240 mg/Day)**
(Adjust to SA forms and frequency and decreased by 10–25% every 1–4 weeks)

1) 60 mg Q8hr for 4 weeks; then
2) 45 mg Q8hr for 4 weeks; then
3) 60 mg Q12hr for 4 weeks; then
4) 30 mg Q8hr for 4 weeks; then
5) 30 mg Q12hr for 4 weeks; then
6) 15 mg Q8hr for 4 weeks; then
7) 15 mg Q12hr x 4 week then discontinue SR; then

**Taper ROT (Morphine IR 15 mg BID)**

Speed of reduction will vary by indication and patients pain levels and function

8) 7.5 mg Q8hr for 2 weeks; then
9) 7.5 mg Q12hr for 2 weeks; discontinue

**Assess:**
- Check for aberrancy (run a state prescription drug monitoring program report and obtain a urine toxicology screen)
- Evaluate for adverse effects and effectiveness of the current medication
- Screen for mental health disorders such as PTSD, depression and substance use disorders and refer to mental health or treat accordingly

*These are general recommendations only; specific clinical decisions should be made by the treating provider based on an individual patient’s clinical condition.*