

Opioid Rotation Basic Consideration

Reasons for rotation/conversion. Rotation to a new opioid may be considered for the following reasons:

- Adverse effect or allergic response to another opioid
- Lack of or insufficient response with another opioid; however, adding a co-analgesic might be sufficient. due to genetic variability there is variable response to different opioids. Also may be due to tolerance developing or the dose required for a particular opioid exceeding maximum dose.
- Conversion from a short-acting opioid to a long acting opioid to provide more stable analgesia as well as the convenience of fewer doses
- Conversion from one extended release/long acting opioid to another may be necessary due to adverse reactions, insufficient pain relief, or tolerance (Fine, 2011).

Conversion between opioids is complex. Practice is evolving with respect to opioid rotation.

Traditionally, experts have recommended use of equianalgesic charts as a basis of opioid rotation. Such charts have been used to calculate the equianalgesic dose of a new opioid then it has been recommended that the new opioid being given at a fraction of the calculated equianalgesic dose to account for relative lack of tolerance to the new opioid. However, because equianalgesic charts are based on single dose studies (not long-term use), vary in dose equivalence reported, and do not take into account the wide variability of patients responses to opioids based on biogenetic predisposition, rotation doses based on this procedure may not be appropriate or safe for all patients. (Fine, Portenoy 2010)

A new paradigm for converting between opioids has recently been proposed. (Webster & Fine, 2012). Based on review of the literature, Fine and Webster concluded that individual opioids and patient responses to them are dissimilar enough that the patient needs to be treated as if they are opioid naive for the new drug and the dose should be titrated up carefully. Oftentimes, it was observed, the final effective dose of the new drug is the same for a patient with tolerance to other opioids, as for a patient who is not tolerant of any opioids. Careful stepwise dose titration is needed because of the patient variability as well as variable pharmacokinetic and pharmacodynamic properties (Vissers, et al, 2010). Patients should be followed closely during all periods of dose adjustments as if a new patient.

This new proposed paradigm for conversion to another opioid suggests that equianalgesic tables not be used as a basis for rotation (even with downward adjustment for lack of tolerance). Rather equianalgesic chart use should reserved to guide starting doses and interval of administration.

Meticulous monitoring and individual dose titration are indicated with any chronic opioid therapy.

Take precautions that the patient not self-dose to a dangerously higher dose through limiting prescriptions, patient education, adjunct treatments.

Consider consultation with a specialist when opioid conversion is needed

Patients who are not tolerant to opioids should not be prescribed ER/LA opioids.

References for further reading

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