

Guidelines to be Followed When Using Opioids

1. Use a specific opioid for a specific type of pain.
2. Use adjuvants judiciously to provide additive analgesia and minimize side effects.
3. The five essentials of opioid (analgesic) dosing
 - a. "By mouth": whenever possible, drugs should be given orally.
 - b. "By the clock": schedule doses over 24 hours on a regular basis. Additional "breakthrough" medication should be available on an "as needed" (PRN) basis.
 - c. "By the ladder": use pain medicines "stepwise" according to WHO analgesic ladder
 - d. "For the individual": there is no standard dose of strong opioids. The "right" dose is the dose that relieves pain without causing unacceptable side-effects.
 - e. Attention to detail: pain changes over time, thus there is the need for constant assessment and reassessment.
4. Know how to prevent and manage side effects of opioids: nausea, sedation, constipation, cognitive impairment.

Facts About Opioid Addiction.

1. The incidence of addiction in patients receiving opioid therapy for pain relief is no different than that of the general population at less than 1%.¹⁰
2. Patients will become physically dependent when treated with opioids for a time and therefore will have effects of withdrawal if the opioid is stopped suddenly.
3. Physical dependency is easily managed by a slow taper of the opioid when pain has resolved.
4. Physical dependency is not synonymous with addiction.
5. Addiction is a psychological problem rather than a physical one and is characterized by patients engaging in manipulative behaviors to secure the drug.
6. Individuals who are addicted use opioids for reasons other than pain. Taking drugs for pain management is different than taking them for pleasure.

Indications for Using Adjuvants with Opioids

1. Adjuvants may be used with opioids to control side effects.
2. Adjuvants may be used for specific pains not responding well to opioids.
3. Adjuvants may be used as an "opioid-sparing" agent to decrease the dose of opioid when side effects of opioids become troublesome.

Morphine. Both the parent compound and the metabolites can be removed by dialysis, but be alert for “rebound” as drugs and/or metabolites re-equilibrate between CNS and plasma. Metabolites would accumulate in between dialysis sessions, and extra dosing may be needed during or after dialysis. There are better alternatives, so morphine is best avoided in dialysis patients.

Hydromorphone. Use carefully, and monitor the patient. Hydromorphone has been used without adverse effects in dialysis patients. The parent drug is partly removed by dialysis, but there are no data concerning dialysis of the metabolites, and metabolite accumulation is a risk.

Oxycodone. There are no data on the dialysis of oxycodone and its metabolites. Until such data are obtained, the use of oxycodone in dialysis patients is best avoided.

Codeine. Do not use. The metabolites accumulate in renal failure, and serious adverse effects from codeine have been reported in dialysis patients.

Methadone. The metabolites are inactive, and it is not dialyzed. No dose adjustments are required in dialysis patients. The usual precautions taken when prescribing methadone should still be observed.

Fentanyl. Appears safe, at least over short periods. The metabolites are inactive, and although there is some concern that the parent compound may accumulate in renal failure, the clinical significance of this is not known. It is not dialyzed, so in most cases, no dose adjustments have to be made for dialysis patients. However, fentanyl may adsorb onto one type of filter, in which case changing the filter is recommended, but if that is not possible, changing to methadone is recommended.

The “safe” opioids (fentanyl and methadone) are not dialyzable, so, as with all of the opioids, caution is needed in titrating these drugs in renal failure/dialysis patients, and close monitoring is advised for a protracted period of time.

Data drawn from - Dean M. Opioids in Renal Failure and Dialysis Patients. *Journal of Pain and Symptom Management* 2004;28:497-504