

CO's CURE

Oral Ketamine Tip Sheet

Indications:

- Suitable candidates for analgesic dose oral ketamine are those with moderate to severe pain. It may be particularly useful for those with a history of chronic opioid tolerance, neuropathic pain and pain refractory to conventional therapies or intolerable side effects from conventional therapies.

Actions:

- NMDA receptor agonist that blocks glutamate activity
- At low analgesic doses (sub-anesthetic), ketamine can provide analgesia and modulate central nervous system sensitization and opioid tolerance, providing additive analgesic properties with other analgesics.
- Ketamine is metabolized and conjugated in the liver before being excreted in the urine, with partially active metabolites.

Precautions include:

- Avoid use if seizures or non-epileptic seizures, psychosis, mania, dissociative psychiatric disease, history of ketamine abuse, poorly controlled hypertension, heart failure, arrhythmia, increased intracranial pressure (including brain lesion, intracranial bleed), recent stroke, severe respiratory insufficiency, post-traumatic stress syndrome or pregnancy. Ketamine can cause dose dependent sedation. OK for use for patients with depression, anxiety.

Adverse effects (less likely with oral ketamine versus IV infusion):

- Central Nervous System: drowsiness, confusion, hallucinations, psychosis
- Cardiovascular: hypertension, tachycardia
- Gastrointestinal: nausea, vomiting

Dosing:

- Starting dose po ketamine 25-50 mg TID with meals
- Titration: Can increase by 25-50 mg per dose every one to three days based on efficacy and adverse effects
- Injectable formulation is utilized for oral ketamine administration – it has a bitter taste that may be lessened by mixing with a sweet drink
- Maximum recommended daily dose 1000 mg PO
- Do not prescribe on discharge

Monitoring:

- Consider checking vitals one hour after initial oral dose, then every four hours. If acute change in vitals or intolerable side effects, stop ketamine.

Blonk M, Koder B, et al. Use of oral ketamine in chronic pain management: A review. *European Journal of Pain*. 2009.

Cohen SP, et al. Consensus guidelines on the use of intravenous ketamine infusions for chronic pain from the American Society of Regional Anesthesia and Pain Medicine, the American Academy of Pain Medicine and the American Society of Anesthesiologists. *Reg Anesth Pain Med*. 2018.

Schwenk ES, et al. Consensus guidelines on the use of intravenous ketamine infusions for acute pain management from the American Society of Regional Anesthesia and Pain Medicine, the American Academy of Pain Medicine and the American Society of Anesthesiologists. *Reg Anesth Pain Med*. 2018.

