

IV Ketamine Infusion

Why is this medication prescribed?

Ketamine is a medication most commonly used as an anesthetic during surgical procedures. At lower doses, ketamine is used to treat certain types of nerve pain that have not responded to other pain management approaches. The most common condition for which IV (intravenous) ketamine infusions are used in the pain clinic is complex regional pain syndrome (CRPS).

When does this medication start to work and how long will it work for?

- If ketamine is going to provide pain relief, you should notice a difference within 2 days. The duration of benefit from ketamine varies greatly between patients so it is difficult to predict how each patient will respond to an IV ketamine infusion.
- ***In order to assess the value of each ketamine infusion, it is very important to have clearly established goals for what you hope to accomplish with the ketamine infusion. To assess your progress in achieving these goals, it is important to keep a diary describing your pain relief and function after each ketamine infusion.***

How do you know if this medication is working?

- A positive response to an IV ketamine infusion is considered as 30% or more pain relief along with the ability to function better. For example, the ability to participate in physiotherapy/occupational therapy activities, to return to work or perform household chores that were previously difficult to do. The benefit should last more than 3 weeks following the infusion. The ability to reduce opioid use is also considered a positive outcome.
- If the goals of a ketamine infusion are not achieved, the dose may be re-assessed because a higher dosage may be appropriate. Otherwise, ketamine infusions will be stopped.

What side effects can this medication cause?

- Nausea/vomiting
 - If this happens, an anti-nausea/vomiting medication called ondansetron may be given with the ketamine infusion.
- Anxiety, disorientation, nightmares/vivid dreams, short-term memory loss (more research is needed about ketamine's impact on long-term memory)
- Transient hallucinations or an out-of-body experience can occur during the infusion.
 - If this happens, a calming medication called midazolam may be given.
- Sleepiness during the infusion
- Increased blood pressure and heart rate
- Urinary issues such as cystitis (inflammation of the bladder)

More research is needed to determine the long-term risks of repeated IV ketamine infusions.

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What special precautions should I follow?

- Some people may have other medical conditions that can increase the risk of harm with ketamine use. Not everyone is a candidate for an IV ketamine infusion. It is important to tell your doctor if you have or have had any of the following health issues:
 - High blood pressure, unstable angina, heart attack, heart failure, or stroke
 - Uncontrolled thyroid disorder
 - Brain injury/tumor, memory difficulties, or mental health concerns (e.g., a history of hallucinations)
 - Liver disease
 - Are pregnant or breastfeeding or may be in the near future
- Tell your health care providers about all the medications you take (prescription, non-prescription, herbals, over-the-counter products, etc.) so drug interactions can be minimized.

Driving limitations following ketamine infusion

- You must have a driver to take you home after receiving an IV ketamine infusion.
 - ***If you do not have a driver to take you home when you arrive at your appointment, your ketamine infusion will be cancelled.***
- You should not drive again until you are able to concentrate and have a clear state of mind.