

## **Ketamine Treatment Information**

Before you agree to this treatment, it is important for you to know the reason why it is being done and the process it will involve. It is important to know the potential risks and benefits you might receive. Read the information below and discuss it with family and friends as you wish. Ask a nurse or care provider if there is anything that is not clear, or if you would like more details.

## Indications

1. Ketamine is a schedule III FDA approved medication for anesthesia. At lower doses, ketamine can be used off-label for treatment resistant depression, but it is not FDA approved for this indication. Treatment resistant depression means that a patient has failed 2 adequate trials of 2 different FDA approved antidepressant medications.

2. Ketamine may improve severe depressive symptoms including sadness, suicidality, and helplessness.

3. Ketamine alters a chemical called glutamate by blocking NMDA receptors in the brain and may produce a more rapid antidepressant effect compared to drugs that work on serotonin, dopamine, or norepinephrine.

4. Patients should start to receive an antidepressant benefit from a single dose within 40-120 minutes. This is unique because most oral antidepressants require 4-6 weeks before taking full effect.

5. The duration of effect is specific to the individual patient. Most patients have an effect that lasts 3-7 days from a single dose.

## Procedure

• Prior to the administration of ketamine, some medical tests are required, including a complete blood cell count, complete metabolic profile, drug screen, BetaHCG pregnancy test for women, and an electrocardiogram.

• Ketamine dosing for depression is weight based and usual doses are between 0.5 mg/kg and 0.75 mg/kg. Higher doses are often associated with more side effects and are not necessarily associated with better depression treatment outcomes.

• The injection is given as a deep intramuscular (IM) injection using a 1 1/2-inch or 2-inch 20-gauge needle into a deltoid muscle. This route tends to have fewer adverse effects compared to an IV administration.

• Patients are observed for 2 hours with periodic assessments at 15-min intervals. There will be an evaluation of the injection site for any signs of an adverse reaction (redness, swelling, itching, etc.). The nurse will look for signs of confusion, disorientation, or any unusual perceptual sensations. There will be monitoring for the presence of suicidal thinking and vital signs will also be taken.