

Ketamine – medicine for pain relief

Why is my child being prescribed ketamine?

Ketamine is a short-acting anaesthetic medicine which has pain relief properties when prescribed at low doses. It is used for nerve (neuropathic) pain and other complex pain.

Neuropathic pain may respond only partially to morphine and other neuropathic pain medicines, for example gabapentin, pregabalin or amitriptyline. Ketamine can be used to relieve sudden onset or short-lived episodes of neuropathic pain.

Ketamine should be taken as prescribed for pain and is usually taken alongside morphine or morphine-like medicines. It is prescribed when:

- Pain is not relieved by other regular neuropathic pain medicines
- Pain is not relieved by morphine and morphine-like pain medicines alone
- Specialist medical support is available.

How does ketamine work?

- Ketamine works by changing the way the brain and nerve pathways in the body respond to pain
- A dose of ketamine can take up to 30 minutes to start to relieve pain. A second dose can be given after one hour if pain persists. If you need to administer more than two doses because your child is in pain, please contact the symptom and palliative care team for further advice.
- Ketamine is cleared from the body four to six hours after giving it and sometimes longer
- Ketamine may cause short-term memory loss which reduces your child's pain memory
- Your child's pain is complex so it may take time to get the 'right' dose to provide effective pain relief.

How will my child take ketamine?

Ketamine may be given by mouth (oral), between the cheek and gum (buccal), into the nose (intranasal) and by injection.

Ketamine oral liquid medicine may be obtained through the pharmacy as a special order and takes up to one week for delivery. Ketamine oral liquid medicine is used for the oral, intranasal and buccal routes; 50mg/5ml is the standard strength that is dispensed. It comes in different flavours, although at The Royal Marsden, we use the vanilla flavour. An oral syringe and adapter should be dispensed with the medicine.



Your child's doctor will prescribe a small dose at first but may increase the dose dependent on how your child's pain responds. You should only give what is prescribed and the dose will be carefully explained to you.

What special precautions should I follow?

Ketamine liquid should be stored safely in a cupboard at room temperature.

What side effects might my child experience when taking ketamine?

- Vomiting
- Fatigue (feeling sleepy)
- Vivid dreams/hallucinations
- Excess salivation/secretions
- Random movements
- Rash (short lasting)
- Increase in heart rate
- High blood pressure
- Poor concentration
- Lack of emotional reaction
- Reduction in memory
- Dizziness
- Blurred vision.

Vivid dreams and hallucinations are uncommon because ketamine is prescribed at a small dose, but can be distressing if they occur. If they do occur, they can be controlled by giving haloperidol or midazolam medicine which will be given to you when ketamine is first prescribed. If your child experiences vivid dreams or hallucinations, the dose of ketamine may need to be adjusted or the haloperidol or midazolam medicine doses changed. Please contact the symptom and palliative care team for further advice.

What are the effects of 'too much' ketamine?

As with any strong pain medicines that can be **fatal** in **large unprescribed** doses, seek emergency advice **immediately** if you think too much of this medicine has been used. These effects may include:

- Extreme drowsiness
- Shallow slow breathing
- Confusion
- Inability to speak
- Body movements severely compromised.



What other information should I know?

Inform your prescribing doctor if your child is taking any complementary medicines and/or over-the-counter medicines at any time.

Contact details

If you have any questions about this information, please contact:

The Children and Young People's Oncology Outreach and symptom care Nurse Specialist (CYPOONS) team

Tel: 020 8661 3625

Hours: Monday to Friday, 9am-5pm

Evenings, nights, weekends and all bank holidays

Please call The Royal Marsden switchboard, speak to the operator and ask for the **PATCH** service.

The Royal Marsden switchboard: 020 8642 6011

