

# Ketamine sedation for children

**Guidelines for Parents** 

#### Other formats

If you need this information in another format such as audio CD, Braille, large print, high contrast, British Sign Language or translated into another language, please contact the PALS desk on 01271 314090 or at rduh.pals-northern@nhs.net.

## What is ketamine?

Ketamine is a drug that has been in use since 1970. It is a sedative and painkilling drug which also results in patients not remembering the procedure. Several large studies have shown that ketamine is the safest and most effective choice of sedative for children who require a short emergency procedure.

# Why is it needed?

Your child has an injury that requires proper cleaning, exploration and repair. Alternatively, they have a fracture or dislocation needing manipulation. These of course can be painful and distressing procedures. To minimise this and to allow the doctor to treat your child properly, it may be necessary to give some sedation.

## What does ketamine do?

Within a minute or two of the injection, your child's eyes will glaze over, and they will stop responding to you. They will still be breathing normally, but will not notice what is happening. This lasts 20 to 40 minutes. Your child will then begin to notice you again, and recovery will continue over next hour or so.

#### What are the side effects?

- 1 in 10 children develop a "red flush" which will disappear as the ketamine wears off.
- 1 in 10 children have eye watering or drooling.
- 1 in 15 children can feel a little sick once they wake up. This may last for 24 hours. Vomiting may occur.
- 1 in 50 children become agitated after the procedure but this is rarely a problem.

 Less than 1 in 100 children develop noisy breathing which is due to a tightening of the windpipe. This is normally easily addressed. 1 in 500 require a general anaesthetic to resolve this.

# Why is there so much equipment?

This is a safety precaution. Any sedation can cause breathing or blood pressure problems. This is rare. The doctor and nurse present are experienced and trained in sedation and use of all the equipment. The only interventions that are usually required are some oxygen by facemask or suction to remove saliva.

# Is there an alternative?

Your child may already have been given some painkillers, and your presence is comforting. Sometimes cuts, called lacerations, require stitching. Many young children are unable to relax enough to tolerate an injection of local anaesthetic, and then stitching, both of which can be painful. Similarly, manipulation of a broken bone or joint needs more than just painkilling drugs. Ketamine is the best drug if a sedative is to be used.

The alternative is a general anaesthetic. This requires hospital admission, and often an overnight stay. General anaesthesia also carries a small risk of breathing or blood pressure problems.

# What happens now?

We will ask for verbal consent. Your child will be weighed so that we can accurately calculate the dose of ketamine. Normally we will try to give the drug directly into a vein. To do this we need to insert a cannula (a drip) and to minimise the pain of this we may apply a local anaesthetic gel over that vein 40 minutes before the procedure.

Some children have veins that are difficult to access and we may consider injecting the ketamine directly into your child's thigh instead.

You do not have to stay with the child if you do not want to. We understand that some parents may be too nervous or upset. However, it would help the child and us if you stay at least until the injection is given and they start to get sleepy.

A sensor will be attached to your child's finger or toe. This measures the amount of oxygen in the blood by shining a light through the finger or toe. As we inject the ketamine, we encourage you to talk to your child about happy experiences or watch a suitable DVD with them.

At the end of the procedure, your child may be placed on his or her side. During this period your child may appear confused, say inappropriate words, sing or cry as he or she wakes up. This is normal after ketamine and will disappear within a couple of hours.

Following the procedure, your child will normally be allowed home once he or she fully recognises you and can walk unaided. This will normally take at least 60 minutes. During this period, please try to keep your child still as rapid movements promote vomiting.

Ketamine sedation for children Page 2 of 4

# After you go home

Sometimes the delayed effects of the medicines may make your child a bit confused, sleepy or clumsy. You need to be extra careful in caring for and supervising your child for the next 24 hours.

Most children recover within 90 minutes. Your child will be safe to go home when they are fully awake, can walk unaided and manage to drink without vomiting. Once home, they should be closely supervised for the first 8 hours and avoid strenuous play or sporting activity for 24 hours.

Supervise all playing and bathing for the next 8 hours after getting home. DO NOT let your child swim or use play equipment (bikes, monkey bars, etc.) that might cause an accident for the next 24 hours.

Sometimes children may feel sick or vomit if they eat a big meal too soon after sedation. Give your child small amounts of clear liquids such as diluted fruit juice, ice lollies, jelly, clear soup, and wait 2 hours before giving them a meal.

Let your child sleep. Children may go to sleep again after getting home from the hospital. Sometimes children may sleep more because of the sedation medicine; this is normal.

#### **Further information**

If you have any concerns that your child may be experiencing problems relating to the sedation that they have received, please contact the Emergency Department to discuss the issues with a senior doctor or nurse.

Please feel free to ask any questions you may have.

#### **PALS**

The Patient Advice and Liaison Service (PALS) ensures that the NHS listens to patients, relatives, carers and friends, answers questions and resolves concerns as quickly as possible. If you have a query or concern call 01271 314090 or email rduh.pals-northern@nhs.net. You can also visit the PALS and Information Centre in person at North Devon District Hospital, Barnstaple.

#### Have your say

Royal Devon University Healthcare NHS Foundation Trust aims to provide high quality services. However, please tell us when something could be improved. If you have a comment or compliment about a service or treatment, please raise your comments with a member of staff or the PALS team in the first instance.

Tell us about your experience of our services. Share your feedback on the Care Opinion website www.careopinion.org.uk.

Ketamine sedation for children Page 3 of 4

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Ketamine sedation for children Page 4 of 4