

Caudal analgesia

Caudal analgesia is a very common method we can use to provide pain relief for children during and after their operation alongside their general anaesthetic. This leaflet will explain how it is performed, the benefits, risks and side effects, and give guidance for when your child is discharged. If you have any questions, please speak to a doctor or nurse caring for your child.

Before your child has their operation an anaesthetist will visit you on the ward and discuss the options of pain relief for your child. You can ask any questions you may have about caudal analgesia or other methods of pain relief at this time.

What is a caudal?

A caudal is similar to an epidural that a pregnant woman might have during labour or that you might have to provide pain relief after surgery.

A caudal involves an injection of local anaesthetic into the caudal space, which is at the bottom of the spine. It works by numbing the nerves that detect pain. It can provide excellent safe and effective pain relief for operations on parts of the body below the level of the belly button and last for 6 to 12 hours afterwards. Occasionally, during the surgery a catheter (small plastic tube) is inserted so that more local anaesthetic can be given after the operation to make the pain relief last longer.

How is it performed?

The injection will be performed once your child is asleep following their general anaesthetic and so it will not cause them any discomfort. Once your child is asleep they will be placed on their side. The anaesthetist will then clean the area and give the injection of the local anaesthetic at the base of the spine.

When do we use it?

Caudals are used for operations at or below the level of the belly button. This includes urology procedures such as hypospadias repair, circumcision, orchidopexy, penile and labial surgery, and general surgery such as hernia repair and orthopaedic procedures on the hip, knee or foot.

What are the benefits of caudal analgesia?

Your child will feel little or no pain while the injection is working. This means that we don't have to give other strong painkillers, such as morphine, which have potential side effects including drowsiness, nausea (feeling sick), vomiting (being sick) and itching. Avoiding these problems after surgery can speed up your child's recovery.

What are the side effects and risks of caudal analgesia?

All procedures or medicines can have potential risks and side effects. We will take all measures we can to limit risks. Serious side effects and risks from caudal analgesia are very rare. The most common and important recognised side effects and complications are described in the table below. Please note that most of these effects are temporary while the caudal is working and the benefits of your child having good pain relief offset the risks most of the time. When the risks outweigh the benefits we will not perform a caudal. The anaesthetist will discuss this with you when you meet. All anaesthetists are highly trained to manage any side effect or risk associated with caudals.

Side effect	Explanation
Very common to common, (1 in 10 to 1 in 100 children)	
Heavy/jelly legs	This is the most common side effect and happens because the local anaesthetic numbs the nerves to the leg muscles. It is temporary and strength will return as the local anaesthetic wears off.
Inadequate pain relief	The injection is not working as well as it could. If this is the case, your child will be given alternative pain medication during the operation.
Difficulty passing urine	Children will usually be able to pass urine once they have had enough fluid. Occasionally a catheter needs to be inserted into the bladder to empty it. This effect is temporary and will return to normal once the local anaesthetic has worn off
Uncommon (1 in 1,000 children)	
Drowsiness	This may occur if other medications have been added to the injection in addition to the local anaesthetic. This is sometimes done if we want the pain relief to last for a longer time after the operation, for example, in particularly painful surgery
Itching	This can occur if morphine-like medicines are added to the caudal. The anaesthetist will decide if this addition is required and discuss it with you at the preoperative visit.
Rare (fewer than 1 in 10,000 children)	
Nerve damage	This is a rare side effect. It can range from a small numb area on the leg that lasts a few days to more serious problems.
Very Rare (1 in 100,000 children)	
Infection	This is very rare as we perform the injection with full sterile precautions and antiseptic technique
Bleeding	This is very rare unless your child has a bleeding condition or is on medication that interferes with bleeding. Occasionally there is some bruising to the skin at the injection site. Very rarely a blood clot can form in the caudal space and cause complications which may need further treatment.
Injection into blood stream	This is very rare and occurs when the local anaesthetic does not work as it has been inadvertently injected into the bloodstream. This can cause complications which may need further treatment. Checks are done before an injection is given to prevent this happening..
Injection into spinal fluid	This can mean that your child will be more numb than expected and possibly higher than their belly button. It may mean their breathing is temporarily affected and your child will need to be monitored closely until the local anaesthetic wears off.

Alternatives

Alternatives include giving stronger medication such as morphine. The surgeon can also put local anaesthetic into the area to numb the skin, but this may only provide limited pain relief. If you have any questions these can be discussed with the anaesthetist before the operation.

Advice for home

Pain relief – even if your child appears to be comfortable, please ensure they continue to take regular mild pain relief (paracetamol and ibuprofen) as this will provide pain relief for your child as the caudal starts to wear off. Your doctor or nurse can tell you how long to give the medicine for.

Safety

As it may take up to 12 hours for the sensation and power in your child's legs to return to normal, please supervise them while walking or crawling. As sensation may be reduced please do **not** use hot water bottles, give your child a hot bath or put them near a radiator as they may not be able to tell if it is too hot and be at risk of burns.

Contact us

If you have any questions or concerns about your child's caudal, please contact the Acute Pain Team on **Bleep 1684**, Monday to Friday, 9am to 5pm. Out of hours, ie, weekends and 5pm to 9am in the week, please contact the on-call paediatric anaesthetist on **Bleep 0254**.

To bleep a member of staff, call the hospital switchboard, **t: 020 7188 7188** and ask for the bleep desk. Ask for the bleep number and wait for a response. This will connect you directly.

For more information leaflets on conditions, procedures, treatments and services offered at our hospitals, please visit www.evelinalondon.nhs.uk/leaflets

Evelina London Medicines Helpline

If you have any questions or concerns about your child's medicines, please speak to the staff caring for them or contact our helpline.

t: 020 7188 3003 10am to 5pm, Monday to Friday **e:** letstalkmedicines@gstt.nhs.uk

Your comments and concerns

For advice, support or to raise a concern, contact our Patient Advice and Liaison Service (PALS). To make a complaint, contact the complaints department.

t: 020 7188 8801 (PALS) **e:** pals@gstt.nhs.uk
t: 020 7188 3514 (complaints) **e:** complaints2@gstt.nhs.uk

Language and accessible support services

If you need an interpreter or information about your care in a different language or format, please get in touch. **t:** 020 7188 8815 **e:** languagesupport@gstt.nhs.uk

NHS 111

Offers medical help and advice from fully trained advisers supported by experienced nurses and paramedics. Available over the phone 24 hours a day. **t:** 111



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