

Caudal analgesia

Caudal analgesia is a very common way to give pain relief to children during and after surgery. This is given alongside their general anaesthetic. This leaflet explains how it is given, the benefits, risks and side effects, and gives guidance for when your child leaves hospital. 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 have about caudal analgesia or other methods of pain relief at this time.

Explaining caudal analgesia

A 'caudal' is like an epidural that someone might have during labour, or after surgery. It involves an injection of local anaesthetic into the caudal epidural space, which is at the bottom of the spine. It works by numbing the nerves that detect pain. Occasionally, during 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.

Caudals give excellent, safe and effective pain relief for operations below the level of the belly button. This includes urology procedures (such as circumcision, orchidopexy, penile and labial surgery), and general surgery (such as hernia repair and orthopaedic procedures on the hip, leg, knee or foot). The pain relief from a caudal lasts for 6 to 12 hours afterwards.

How it is given

The injection is given once your child is asleep after being given their general anaesthetic, so it will not cause any discomfort. Once your child is asleep they will be placed on their side. The anaesthetist cleans the area and gives the injection at the base of the spine.

Benefits of a caudal

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 possible side effects including drowsiness, feeling sick (nausea, being sick (vomiting), slowing the breathing and itching. Avoiding these problems after surgery can speed up your child's recovery.

Side effects

All procedures or medicines 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. Most of these side effects are temporary (while the caudal is working), and the benefits of your child having good pain relief outweigh the risks. In any patients, when the risks outweigh the benefits, we do not give a caudal. The anaesthetist will discuss this with you when you meet.

Very common to common side effects (up to 10 in 100 children)

Heavy or 'jelly' legs	This is a direct effect of the anaesthetic and happens because it numbs the nerves to the leg muscles. It is temporary and strength will return as the anaesthetic wears off.
Not enough pain relief	The injection is not working as well as it could. If this happens, your child will be given different pain relief during the operation.
Difficulty peeing	Children will usually be able to pee once they have had enough fluid. Occasionally the child will be unable to pee and a catheter needs to be inserted into the bladder to empty it. This effect is temporary and will return to normal once the anaesthetic has worn off. Please tell the nurse if your child has not peed or had a wet nappy after 4 hours after surgery.

Uncommon side effects (1 in 1,000 children)

Drowsiness	This can happen if other medicines have been added to the injection of 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 happen if morphine-like medicines are added to the caudal. The anaesthetist will decide if this is needed and discuss it with you before surgery.

Rare side effects (less than 1 in 10,000 children)

Nerve damage	This can range from a small numb area on the leg that lasts a few days, to more serious problems, such as weakness or incontinence. Usually these will resolve within a year. The risk of the damage being permanent is much lower.
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Very rare side effects (1 in 100,000 children)

Infection	We give the injection with full sterile precautions and antiseptic technique, so this rarely happens.
Bleeding	This usually only happens if your child has a bleeding condition or is on medicine 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 need further treatment, including surgery.
Injection into blood stream	This happens when the local anaesthetic is accidentally injected into the bloodstream. This can cause seizures or heart complications which might need further treatment, possibly in the intensive care unit. Checks are done before an injection to stop 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 might mean their breathing is temporarily affected and they will need to be monitored closely until the anaesthetic wears off.

Other pain relief options

Alternatives include giving stronger medicine, such as morphine. The surgeon can also put local anaesthetic into the area to numb the skin, but this might only give limited pain relief. This can be discussed with the anaesthetist before the operation.

Advice after leaving hospital

Even if your child appears to be comfortable, make sure they continue to take regular, mild pain relief (paracetamol and ibuprofen). 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

It can take up to 12 hours for the feeling and strength in your child's legs to return to normal. Please supervise them while walking or crawling as they might be more likely to fall. As sensations might still be reduced, **do not** use hot-water bottles, give your child a hot bath, or put them near a radiator. They might not be able to tell that it is too hot, and be at risk of burns. They might also not be able to move away if their strength has not yet returned to normal.

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. At weekends and from 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, **phone** 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 on conditions, procedures, treatments and services offered at our hospitals, please visit **web** 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, **phone** 020 7188 3003, Monday to Friday, 10am to 5pm **email** letstalkmedicines@gstt.nhs.uk

Your comments and concerns

For advice, support or to raise a concern, contact our Patient Advice and Liaison Service (PALS), **phone** 020 7188 8801 **email** pals@gstt.nhs.uk. To make a complaint contact the resolution department **phone** 020 7188 3514 **email** 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, **phone** 020 7188 8815 **email** languagesupport@gstt.nhs.uk



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