Caudal Anaesthesia

Information for patients, relatives and carers

Child Health

ℹ️ For more information, please contact:

Ward 17 Children’s Ward, Tel: 01904 726017 or 726018
The York Hospital
Wigginton Road, York, YO31 8HE

or

Duke of Kent Children’s Ward, Tel: 01723 342336
Ward Sister, Tel: 01723 236334
Scarborough Hospital
Woodlands Drive, Scarborough, YO12 6QL
Our Values: Caring about what we do ● Respecting and valuing each other
This leaflet should help you understand a caudal anaesthetic (also known as a ‘caudal block’) which is used as pain relief for some operations in combination with a general anaesthetic. Your anaesthetist will also discuss this with you on the day if it is appropriate for your child to receive a caudal anaesthetic and you should ask them any questions you have about the procedure.
What is a caudal anaesthetic?

A caudal anaesthetic is a one off injection of local anaesthetic into the lower area of the spinal column. It is used to provide pain relief for operations on the lower part of the tummy, groin or top of the legs (including hypospadias repair, groin hernias and circumcision). It is used in combination with a general anaesthetic for the operation. It means your child should be more comfortable when they wake up from their operation and will require less pain relief to be given in the early post-operative period. It is used in combination with other pain killers such as paracetamol (‘Calpol’) and ibuprofen but can reduce or remove the need for stronger pain killers such as morphine which commonly cause sedation, itching and nausea. A caudal anaesthetic will usually allow faster recovery from an operation. It provides pain relief for a number of hours and wears off at around 12 hours.

How is a caudal anaesthetic performed?

A caudal anaesthetic is performed once your child is asleep and once you have left the anaesthetic room. They are turned onto their side and a small tube (cannula) is inserted into a space at the very base of their spine. Local anaesthetic is injected through this tube after which it is removed.
Are there any complications of caudal anaesthetics?

Caudal anaesthetics have been used for many years and are very safe, but there are some complications you should know about.

Failure

Occasionally the anaesthetist may not be able to get the cannula into the right space. This is most commonly due to normal variations between patients. If the caudal anaesthetic has failed, your child will be given other forms of pain relief to take.

This is a common risk and occurs in one in 20 children.

Leg numbness & weakness

Your child may experience some temporary numbness and weakness of their legs. This is because the local anaesthetic numbs the nerves that allow movement as well as those that sense pain and touch. Before the anaesthetic wears off, your child should be supervised if they are walking or crawling. Care should be taken to protect them from injury from hot, cold or sharp surfaces as they may not feel pain in their legs as normal (including baths and hot water bottles). This effect will wear off as the local anaesthetic wears off after around 12 hours.

This is a common risk, occurring in one in 10 children.
Urinary retention

A small number of children find it difficult to pass urine while the anaesthetic is still working. A smaller portion of these children may temporarily need a tube putting into their bladder (known as a Catheter) to empty their bladder for them until the anaesthetic has worn off. Most will urinate if they drink enough fluid and we will provide fluids for your child whilst they are on the ward.

This is relatively common and occurs in one in 100 children.

Nerve damage

The point of injection of a caudal anaesthetic is low enough in the spine to only have a very small chance of causing any nerve damage. Your anaesthetist will be able to discuss this further with you on the day.

This is rare, occurring in one in 10,000 children.
Bleeding/infection at the point of injection

As the cannula passes through the skin, your body’s natural barrier to infection, there is a small chance of causing bleeding or infection in the area. A small bruise at the skin is normal but more extensive bleeding or infection can cause nerve damage. If your child has normal blood clotting, the risk of bleeding and formation of a collection of blood at the base of the spine is extremely small. The procedure is done under sterile conditions to reduce this risk of infection again to a very small level.

This is extremely rare and occurs in one in 100,000 children.

Local anaesthetic toxicity

As with all medication, local anaesthetics can only be used in certain amounts and the safe amount for your child will be calculated based on their weight. Rarely, the local anaesthetic may be injected into blood vessels in the area. Your anaesthetist will perform several checks before injecting the anaesthetic to ensure this does not happen but very occasionally smaller blood vessels cannot be detected and adverse signs may be seen despite the correct dose. This can include problems with their heart and in certain circumstances may be life threatening. Your child is fully monitored throughout the procedure and your anaesthetist is trained to deal with this very rare but serious complication.

This is extremely rare and occurs only in one in 100,000 children.
Injection into spinal fluid

Spinal fluid (CSF) surrounds the whole of your brain and spinal cord. If local anaesthetic is injected into this fluid, it can travel higher than expected and cause numbness much higher up the body which can temporarily weaken other muscles such as those used for breathing. This effect would wear off as the anaesthetic wears off but may require your child’s breathing to be supported until this happens.

This is extremely rare and occurs only in one in 100,000 children.
Are there any children who cannot have a caudal anaesthetic?

If your child has any known abnormalities of their spine or blood clotting difficulties, you should alert your anaesthetist as this may mean a caudal anaesthetic is not appropriate. You should also let the anaesthetist know if your child has any infections over the skin at the base of the spine.

What about pain relief after the caudal anaesthetic has worn off?

The pain relief from a caudal anaesthetic should last around 12 hours. Although it reduces the need for very strong pain killers, you will still need to use other forms of pain relief once the anaesthetic wears off. You should start to give your child pain killers in tablet or liquid form before the anaesthetic wears off so they have time to start working. Common pain killers are paracetamol (Calpol) and ibuprofen. The doctors and nurses can give you advice about the right pain killers to use, particularly if your child has any allergies to pain killers.
What do I need to do once my child is home?

Due to possible weakness of their legs, you should supervise your child walking or crawling in the 12 hours after the caudal anaesthetic is given.

You should also protect them from injury from hot, cold or sharp surfaces as they may not be able to feel discomfort from these. This includes baths, hot water bottles and radiators.

If you have any concerns about recovery from the caudal anaesthetic, including worsening weakness of their legs, you should contact the paediatric ward (ward 17 in York Hospital or Duke of Kent ward in Scarborough Hospital) urgently and discuss these with a nurse or doctor.
Tell us what you think

We hope that you found this leaflet helpful. If you would like to tell us what you think, please contact: Dr Justine Heard, Consultant Anaesthetist, The York Hospital, Wigginton Road, York, YO31 8HE, telephone 01904 725399 or email justine.heard@york.nhs.uk.

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Patient Advice and Liaison Service (PALS)

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PALS can be contacted on 01904 726262, or via email at pals@york.nhs.uk.

An answer phone is available out of hours.
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