

Epidural Pain Relief after surgery for children

This leaflet explains more about epidurals, including the benefits and risks. If you have any further questions, please speak to a doctor or nurse caring for your child.

What is an epidural?

It is a continuous infusion of pain relief medicines given into the base of the back, between the bones of the spine, using a small plastic tube called a catheter. A local anaesthetic is injected into the epidural space which is close to the spinal cord and this blocks the pain messages from the surgical site travelling along the pain nerves to the brain. This numbs the body so your child will get good pain relief after their surgery. An experienced anaesthetist will insert the catheter when your child is under general anaesthetic.

Why should your child have a spinal block?

Epidurals are generally used after operations that are expected to be quite painful. They are also used if a child cannot take medicines by mouth for a few days. Epidurals are often used for children who have abdominal (tummy), thoracic (chest) and complex orthopaedic (bone) surgery.

How is an epidural performed?

After your child is asleep, they will be turned on their side and their lower back will be carefully cleaned. Under sterile conditions, the anaesthetist will insert a small needle into the base of the back and insert the catheter. The needle is then removed and the catheter is held in place with a sticky clear plastic dressing. The catheter is attached to a pump which is programmed to give medicines continuously to ensure your child has good pain relief.

How long will my child need the epidural?

Most children have an epidural for three to four days. Your child will go to the Paediatric Intensive Care Unit with the epidural and the nurses there will monitor your child closely. The amount of medicine infused can be adjusted to make sure your child is comfortable. Before the epidural is stopped, the nurses will make sure your child is able to have other pain medicines to keep him or her comfortable. When your child no longer needs the

epidural, the tube will be removed. This is not painful and the nurse will use a wipe or spray to make the sticky dressing easier and more comfortable to remove.

What are the risks?

Epidurals have been used regularly in children for more than 30 years and have an excellent safety record. Several large studies in the UK and abroad have confirmed that epidurals are very safe.

Are there any side effects?

Failure: In a small number of children it may not be possible to perform the epidural or it may not work. In this case, your child will be given other painkillers to keep them comfortable.

Feeling itchy, sick or vomiting: Other medicines can be prescribed to stop these common side effects.

Low blood pressure: Epidurals can cause your child's blood pressure to drop. Your child may need some fluids into their drip to increase their blood pressure.

Headache: Your child may get a particularly bad headache. This happens in 1 in 200 patients. Normally this type of headache resolves with rest, drinking plenty of fluids and taking simple pain killers.

Numbness or weakness: For the period that the epidural is working your child may have numb, weak or tingling legs. This is the normal pain relieving effect of the local anaesthetic. Your child's legs may also feel heavy and possibly difficult to move, although most children can still move around in bed. They may also have difficulty passing urine (weeing), so may need a catheter placed into the bladder to help them pass urine.

Bleeding, infection or nerve damage: As mentioned above, epidurals are safe and the risk of bleeding or nerve damage is extremely low. The estimated frequency of nerve damage is 1 in 10,000 patients, compared with the frequency of being involved in a road traffic accident of 1 in every 200 people. Infection is very unlikely as epidurals are done under sterile conditions in the operating theatre and it only occurs in around 1 in 100,000 patients.

Local anaesthetic toxicity: This is a rare but potentially serious complication due to excessively high levels of local anaesthetic medicine in the blood. Symptoms include confusion, dizziness, metallic taste in the mouth, tinnitus (ringing in ears), tingling around lips and very rarely seizures (fits). These problems are avoided by carefully calculating your child's dose according to his or her weight.

Can any child have an epidural?

If your child has any abnormalities of their back or spine, problems with blood clotting, is taking blood thinning medicines or has had previous allergic reaction to local anaesthetic, then you should tell the anaesthetist before their operation, as an epidural might not be suitable for them. If an epidural is not suitable for your child, the anaesthetist will use a different method to keep your child comfortable.

Useful sources of information

Some of the information for this leaflet has been provided by the Royal College of Anaesthetists and you can get more information about your child's anaesthetic (including age appropriate leaflets, activities and a resource for children with learning difficulties) from the college at

<https://www.rcoa.ac.uk/patient-information/patient-information-resources/information-children-parents-carers>

Contact us

If you have any questions or concerns, please contact the paediatric wards:

Paediatric Intensive Care Unit

020 8725 2431

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

Additional services

Patient Advice and Liaison Service (PALS)

PALS can offer you advice and information when you have comments or concerns about our services or care. You can contact the PALS team on the advisory telephone line Monday, Tuesday, Thursday and Friday from 2pm to 5pm.

A Walk-in service is available:

Monday, Tuesday and Thursday between 10am and 4pm

Friday between 10am and 2pm.

Please contact PALS in advance to check if there are any changes to opening times.

The Walk-in and Advisory telephone services are closed on Wednesdays.

PALS is based within the hospital in the ground floor main corridor between Grosvenor and Lanesborough Wing.

Tel: 020 8725 2453 **Email:** pals@stgeorges.nhs.uk

NHS UK

The NHS provides online information and guidance on all aspects of health and healthcare, to help you make decisions about your health.

Web: www.nhs.uk

NHS 111

You can call 111 when you need medical help fast but it's not a 999 emergency. NHS 111 is available 24 hours a day, 365 days a year. Calls are free from landlines and mobile phones.

Tel: 111

AccessAble

You can download accessibility guides for all our services by searching 'St George's Hospital' on the AccessAble website (www.accessable.co.uk). The guides are designed to ensure everyone – including those with accessibility needs – can access our hospital and community sites with confidence.

Reference: ANA_EPIC_03 **Published:** September 2025 **Review date:** September 2027

