

Spinal block pain relief after surgery for children

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

What is a spinal block?

A spinal block is an injection of pain relief medicines given into the base of the back between the bones of the spine. A local anaesthetic is injected by a fine needle into the fluid that surrounds the spinal cord. This blocks the pain messages from the surgical site travelling along the pain nerves to the brain. Other pain killers, such as morphine, are often added to the injection to give further pain relief after surgery. An experienced anaesthetist will give the spinal injection when your child is under general anaesthetic (asleep).

Why should your child have a spinal block?

Spinal blocks are generally used after operations that are expected to be quite painful. They are often used for children who have major abdominal (tummy), thoracic (chest) and complex orthopaedic (bone) surgery.

How is a spinal block 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 fine needle into the base of the back and

give the injection. The needle is then removed.

How long will the spinal block last?

The numbing effects of the local anaesthetic usually last up to four hours and your child may also not be able to move their legs during this time. The morphine medications can provide pain relief for up to 12 hours after the operation.

What are the benefits of a spinal block?

Spinal blocks provide excellent pain relief for operations that are expected to be quite painful or if your child cannot take medicines by mouth straight away. They may also help reduce bleeding during surgery meaning less likelihood of a blood transfusion.

What are the risks?

Spinal blocks have been used regularly in children and adults for surgery and have an excellent safety record. Several large studies in the UK and abroad have confirmed that they are very safe.

Are there any side effects?

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

Feeling itchy, sick or vomiting: this is due to the morphine in the injection. Other medicines can be prescribed to stop these common side effects.

Low blood pressure: a spinal block 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 times. Normally this type of headache resolves with rest, drinking plenty of fluids and taking simple pain killers.

Excessive sleepiness or breathing problems: the morphine in the injection can slow their rate of breathing. The nurse on the ward will monitor your child closely for these signs and all children having a spinal block are prescribed another medicine that can reverse this effect very quickly.

Numbness or weakness: for the period that the spinal block is working your child may have numb, weak or tingling legs. This is normal pain relieving effect of the local anaesthetic.

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, spinal blocks are safe and the risk of bleeding or nerve damage is extremely low. The estimated frequency of permanent nerve damage is 1 in 50,000 patients, compared with the frequency of being involved in a road traffic accident of 1 in every 200 people. Infection is very unlikely as they are done under sterile conditions in the operating theatre and it occurs in around 1 in 100,000 patients.

Are there any reasons your child shouldn't have a spinal block?

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 a spinal block might not be suitable for them. If a spinal block 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
Jungle Ward	020 8725 2034
Nicholls	020 8725 2098
Frederick Hewitt	020 8725 2081
Pinckney	020 8725 2082

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_SBC_03 **Published:** September 2025 **Review date:** September 2027