

Patient Controlled Analgesia (PCA) pain relief for children

This leaflet explains more about PCAs, 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 PCA?

It is a system that allows pain relief medicine to be given as and when your child needs it. PCA uses a programmed syringe pump, containing a syringe of medicine, which is given into a vein through a thin, plastic tube called a cannula.

The machine has a handset with a button that can be pressed to deliver a safe dose (bolus) of pain relief. There may also be a small amount of medicine being infused into the vein continuously (called a background). When a button is pressed, a dose of medicine is pushed from the syringe into your child's bloodstream via the cannula. It takes between five and ten minutes for the medicine to start working.

The pump is programmed with safety features to avoid too much medicine being given. It 'locks out' for a certain length of time, so that even if the button is pushed again, no more medicine will be given. The pump is also set with the maximum amount of medicine that your child can receive each hour. The machine itself is locked with a key so that these settings cannot be altered.

If your child has a PCA, he or she is given control of the handset and can therefore decide when the pain relief is given and how much. This means that your child has control over their pain and can have pain relief without asking a nurse. **It is important that your child is the only person to press the button.**

What if my child is not suitable for PCA?

An anaesthetist or acute pain team staff will consider the suitability of PCA for each child. If your child is unable to understand the technique or press the button, they will receive a continuous morphine infusion instead. This is a continuous infusion of pain relief medicine and the nurse will regularly assess your child's comfort and check to make sure he or she is

not too sleepy.

Why should your child have a PCA?

These are used when the operation is expected to be quite painful and requires stronger pain relief. It is also used when a child is unlikely to be able to eat or drink for a few days.

What medicines are used?

Morphine is used commonly in the PCA pump. Morphine is a strong and effective pain medicine which is not addictive when given for pain relief. If your child is on high doses of morphine already, the anaesthetist will choose an alternative medicine.

As well as morphine from the PCA, your child will also receive regular paracetamol (Calpol) and possibly a non-steroidal anti-inflammatory drug (NSAID), such as ibuprofen (Nurofen) or diclofenac.

Are there any side effects?

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?

Sometimes the morphine can cause your child to become too sleepy and it may also slow their breathing rate. It can also make your child feel sick, itchy and get abdominal (tummy) pain with constipation. The nurse on the ward will monitor your child closely for all these signs and will carry out hourly assessments on his or her pain, level of sedation (sleepiness) and any side effects. Medicines can be given to combat these side effects.

How long will my child use PCA?

Most children will use the pump for two to five days although it can be continued for as long as needed. Your child's pain relief will be checked daily and when your child is feeding normally the pump may be switched off following which he or she may have the morphine by mouth or through a feeding tube.

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_PCAC_03 **Published:** September 2025 **Review date:** September 2027