

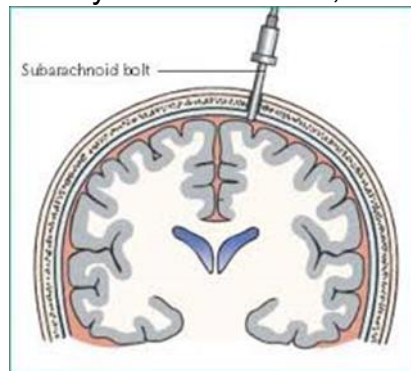
Nicholls Ward / PICU

Intracranial Pressure (ICP) Monitoring

This leaflet explains intracranial pressure monitoring, including the benefits, risks, any alternatives and what you can expect when you bring your child to hospital. If you have any further questions, please speak to a doctor or nurse caring for your child.

What is intracranial pressure (ICP) monitoring?

Intracranial pressure (ICP) monitoring measures the pressure inside your child's head, using a pressure monitor inserted through the skull. There are various reasons why this procedure may be needed, for instance, after a head injury or surgery to the brain. The surgeons will explain why your child needs ICP monitoring and for how long it may be needed.



Monitoring usually lasts 24 hours but can occasionally be needed for several days. ICP monitoring is usually performed on Nicholls ward although it can also be done in the intensive care unit if that is where your child is being nursed.

What happens before the ICP monitor is inserted?

If this is a planned procedure for your child, you will have received information about how to prepare your child for the procedure. On the day, the surgeon will explain the procedure in more detail, discuss any worries you may have and ask you to give your permission for the procedure by signing a consent form. Another doctor will visit you to explain about the anaesthesia.

If your child has any medical problems, particularly allergies, please tell the doctors about these. Also please bring in any medicines which your child is currently taking.

What does ICP monitoring involve?

The ICP monitoring device (ICP bolt) is inserted in a short procedure while your child is under a general anaesthetic. Once your child has returned to the ward, the nurses will observe him or her closely. The ICP bolt may take some time for the pressure inside the head to settle after the procedure.

The ICP bolt must remain connected and not switched off throughout the monitoring. The data will be downloaded daily and readings will be taken hourly by the nurses.

You may notice a change in the pressure reading if your child does anything that alters the pressure inside his or her head. This can include moving about, changing position in bed, coughing, sneezing, vomiting or crying. You will also notice that the pressure reading changes depending on whether your child is awake or asleep. Your child's nurse will check your child's level of alertness regularly while ICP monitoring is happening. He or she will record the pressure readings as well as what your child was doing at the time to build up a complete picture.

During ICP monitoring on the ward (outside the intensive care unit), we encourage your child to carry on with everyday activity as far as possible. This ensures that the ICP monitoring accurately reflects the pressure inside your child's head during normal life. Your child's nurse will secure the ICP bolt to reduce the chance of it being knocked or pulled but distracting your child with toys and games will also help. Play therapists are available Monday to Friday on the ward to help keep your child active and stimulated.

Are there any risks?

ICP monitoring is considered a safe procedure which gives good information to understand your child's condition and to plan any treatment. However, as with all procedures, there are a few potential problems you should know about. Bleeding and infection are always a risk with any procedure that breaks the skin. The nurses will regularly check the site where the ICP bolt is inserted.

There is also a slight chance that a small amount of cerebrospinal fluid could leak from the insertion site. Again, this will be checked regularly but if your child develops a headache, please tell the nurses. In most cases, this will be due to the procedure itself rather than any CSF leakage and can be treated with pain relief medicines. Occasionally, monitoring may need to last for a few days if enough information has not been recorded.

What happens afterwards?

When enough information about your child's intracranial pressure is available, ICP monitoring will be stopped. The ICP bolt will be removed on the ward after your child has been given medicines to ease any discomfort or anxiety. The neurosurgeon will tell you if the suture needs to be removed and when.

Before you go home, your child's nurse will explain about caring for the wound and when your child can go back to normal activities and school. The stitches will need to be removed by your family doctor (GP) after a week after which time you can wash your child's hair.

When will we get the results?

The neurosurgeon will discuss the results with you once the readings have been analysed and will plan any treatment needed.

Contact us

- If your child becomes drowsy or confused.
- If your child develops a temperature within a few days of discharge.
- If the wound site looks red or inflamed and feels hotter than the surrounding skin.
- If there is any oozing from the wound.

Clinical Nurse Specialists in Paediatric Neurosciences

(Monday to Friday 8am to 5pm)

Telephone: 020 8725 2649

E-mail: paedneurocns@stgeorges.nhs.uk

Out of hours:

Nicholls ward 020 8725 3389 or 020 8725 2098

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

Was this information helpful? Yes / No

Please let us know, contact patient.information@stgeorges.nhs.uk and include the leaflet title.

Thank you.

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.

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

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

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

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.



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