

Malrotation and Volvulus

Newborn Services

This leaflet offers more information about malrotation and volvulus. If you have any further questions or concerns, please speak to the staff member in charge of your baby's care.

What is malrotation?

In early pregnancy, the bowel is a tube that grows out entering a cavity in the umbilicus as it develops into the large and small bowel. By week 12 of pregnancy the bowel has returned, rotated and fixed in the abdomen. Malrotation is the abnormal positioning and fixation of the bowel and affects one in every 2,500 to 3,000 babies, affecting boys and girls equally.

Why is malrotation a concern?

In normal rotation and fixation, the blood supply to the bowel has a wide base. In malrotation, the blood supply to the bowel is through a narrowed base which places it at risk of twisting or volvulus.

What is volvulus?

Volvulus is when the malrotation bowel twists and blocks off the blood supply to the bowel.

How is malrotation/volvulus diagnosed?

Typical symptoms in a newborn infant are bilious (green) vomits, abdominal pain, being pale and lethargic.

A doctor examines your baby and a special X-ray is performed. A dye is passed down a tube into the stomach and a series of X-rays is taken to show the position of the bowel and to see whether it is twisted.

How are they treated?

Malrotation/volvulus is treated as an emergency operation under general anaesthetic, as the bowel can die from the lack of blood supply. There are no alternatives to surgery.

What happens before the operation?

Your baby will need a 'drip' (a small cannula in a vein) for IV fluids and a naso-gastric tube (NG tube), which is passed up the nose into the stomach to drain the bile and the air in their stomach. This will make your baby feel more comfortable.

What does the operation involve?

The operation is called a Ladd's procedure. The surgeon will make a cut over the upper abdomen and may have to untwist the bowel and confirm it is healthy before widening the base where the blood vessels pass to the bowel. This almost eliminates the risk of volvulus happening again. The bowel cannot be put back into a 'normal' position and for this reason the appendix is removed to avoid problems in diagnosing appendicitis later in life.

Occasionally, some of the bowel will have sustained significant injury and will not be able to survive and so it is removed. The surgeons will discuss with you any variation from the usual procedure.

What happens after the operation?

Your baby will come back to the neonatal unit on a ventilator to help them breathe. The nurses will give pain-relieving medicines to your baby so that they are comfortable. During this time your baby will get nutrition (PN) through a long line through a vein.

The amount of green fluid aspirated from the stomach and stools are monitored over the following days and milk feeds are started when the bowels are working again. The milk feeds are increased slowly until full feed volumes are reached. If you wish to breast feed the nursing staff will teach you how to express and store your milk to feed your baby when they are ready. Your baby will be able to go home once he or she is feeding well and starting to gain weight.

Long-term and follow-up

Following discharge from the neonatal unit, there will be regular check-ups to monitor your baby's progress. Your baby will be seen in the outpatients department, which may take place at your local hospital. Your baby should be able to feed and wean normally.

If St George's Hospital is not your local hospital

Once your baby has had surgery and made a good recovery, i.e. when their specialist medical and nursing requirements are fewer, your baby will be transferred back to the care of your local hospital. This transfer is a sign of progress and will not occur until your baby is ready. It will allow you to be closer to home and become familiar with your local healthcare professionals.



Useful sources of information

BLISS

Bliss is a support group which is able to offer support and advice to families with babies with a range of conditions.

Fourth Floor
Maya House
134-138 Borough High Street
London
SE1 1LB



Enquiries: 020 7378 1122

Email: hello@bliss.org.uk Website: www.bliss.org.uk

Use your smartphone to scan the QR code (you may need to download a QR code scanning app). Use your smartphone to scan the QR code (you may need to download a QR code scanning app).

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 on-the-spot advice and information when you have comments or concerns about our services or the care you have received. You can visit the PALS office between 9.30am and 4.30pm, Monday to Friday in the main corridor between Grosvenor and Lanesborough wings (near the lift foyer).

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

NHS Choices

NHS Choices 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 of 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.