

Neonatal stroke

This leaflet gives information for families who have been told their baby has had a stroke around the time of birth. It answers some common questions and gives an overview of neonatal stroke.



What is a stroke?

A stroke happens when blood supply to part of the brain stops. There are 2 main types of stroke.

- **Ischaemic** strokes are caused by a blockage in the blood supply to the brain.
- Haemorrhagic strokes occur when blood leaks from a burst blood vessel into the brain.

It can be difficult to identify the symptoms of stroke in babies. They might seem generally unwell, have seizures, or appear drowsy.

Why babies have strokes

The causes of stroke in babies are very different to those in adults. The stroke can be related to:

- clots breaking off from the placenta during the birth process, and travelling to the child's brain
- a blood-clotting disorder that the mother or baby has
- an underlying medical condition, like a heart problem or sickle cell disease, which has an impact on how effectively blood is supplied to the brain
- an underlying abnormality in the vessels taking blood to or from the brain
- an infection or illness in the mother or baby around the time of birth

It might not be possible to identify the specific cause of a stroke in all babies. It can be the result of several factors happening at once.

Tests your child might have

Some tests might be recommended to help understand the cause of your baby's stroke, and to see if more treatment is necessary. Not all babies will need to have all of these tests. Some of the tests are:

- MRI (brain scan)
- heart scan
- blood tests
- EEG (a test to record the electrical activity of your child's brain)

Some of these tests might need to be repeated as your baby grows and develops. Some tests take some time to be completed (for example blood tests for possible genetic causes). Some tests might also be done on the parents.

What this means for your child's development

When a stroke happens, and blood supply to part of the brain stops, there can be damage. Different parts of the brain have different functions, so the consequences of a stroke vary. Some babies recover fully after a stroke, while others have difficulties with movement, communication, thinking, and learning skills, and can be at risk of epilepsy. It can take time for the full impact of a stroke to become clear.

The doctors who have looked at your baby's brain scan might be able to give you some indication of how their development will be affected.

It is important to have continued access to medical and therapy assessment and advice as your child develops. This is so that any potential difficulties can be identified and treated.

How to support your child's recovery

Your child will be assessed by the therapy team while they are still in hospital. We will contact the child development services in your area. It is important that you have the opportunity for review with a doctor and therapy team. They will monitor your baby's development and provide advice. If your baby needs more help, this will be arranged by your local team. You might also be seen by the neonatal stroke team in clinic at Evelina London.

Here are some general tips to support your baby's development. Encourage them to:

- look at you, and practice getting them to follow your face or a toy.
- reach for and explore toys with both hands.
- look to both sides (you can do this by placing interesting toys or pictures on either side of their cot, and by approaching them and speaking or singing to them from both sides)
- experience play in a variety of positions, including on their back, both sides, and tummy (your baby should always sleep on their back)

Questions to ask before you leave hospital

It can be helpful to ask the team looking after your baby these questions.

- Will we have a copy of a discharge summary, and does this go to our GP and health visitor?
- Will we have a list of medicines we should give our baby, and information about how to get more if we need to?
- Which teams has our baby been referred to for follow-up and review? Can we have their details and phone numbers if we need to contact them?
- What should we do if we become concerned our baby is having a seizure, showing signs of further stroke, or becoming unwell?

Support and more information

Bliss – supports families with premature or sick babies, web www.bliss.org.uk

Stroke Association – support service and resources around childhood stroke, **web** www.stroke.org.uk/childhood-stroke

Contact us

If you have any questions for the team, please **phone** 020 7188 4000, Monday to Friday, 9am to 5pm. For questions about your appointment, please contact our appointments team, **email** PaediatricAppointmentsNeurology@gstt.nhs.uk

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

Evelina London Medicines Helpline

If you have any questions or concerns about your child's medicines, please speak to the staff caring for them or contact our helpline. **phone** 020 7188 3003, Monday to Friday, 10am to 5pm, **email** letstalkmedicines@gstt.nhs.uk

Your comments and concerns

For advice, support or to raise a concern, contact our Patient Advice and Liaison Service (PALS). To make a complaint, contact the complaints department. phone 020 7188 8801 (PALS) email pals@gstt.nhs.uk

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