

Vascular Malformation

This leaflet provides information about what to expect during your admission, before and after treatment, and for discharge. If you have any further questions or concerns, please speak to the staff member in charge of your care or ask them to contact the Neurovascular Clinical Nurse Specialist to come to speak to you. You will be given a Vascular Malformations booklet, produced by the Brain & Spine Foundation, with detailed information. Please ask for an extra copy if you need it for a relative.

What are Vascular Malformations?

Vascular malformations of the brain are a group of disorders that involve abnormal connections of some of the blood vessels in the head. ('Vascular' refers to blood vessels and 'malformation' means abnormally shaped or formed.) The main types are:

- Arteriovenous malformation (AVM) of the brain
- Arteriovenous Fistula (AVF) of the dura (the brain's outer covering)
- Cavernous malformation (Cavernoma)
- Developmental venous anomaly
- Capillary telangiectasia.

There is more information in the Vascular Malformations booklet.

What are the signs and symptoms?

You can have a stroke and the following signs and symptoms can occur suddenly: headache, some people may also vomit, lose consciousness, have slurred speech, drooping on one side of the face, have a stiff neck or the light may hurt their eyes. Some people may have a fit / seizure or have weakness on one side of their body, some have balance issues. There is more information in the Vascular Malformations booklet.

Do I need any tests to confirm the diagnosis?

You will need a scan, maybe two. This will be a CT scan and / or a CT Angiogram (CTA), which shows the blood vessels in the brain more clearly than a plain CT scan. Dye is injected into the drip in your arm. Depending on the results of the CTA, you may need an angiogram.

For an angiogram, local anaesthetic is used to numb the groin area or arm, before a small catheter is inserted into the large artery in the groin (femoral artery) or into the arm (radial artery). The Radiologist gently passes the catheter through blood vessels in your body to the neck. Dye is then injected through the tubing and X-rays are taken of the blood vessels of the brain. There is more information in the Vascular Malformations booklet.

What treatments are available?

Craniotomy, stereotactic radiosurgery, embolisation, drug treatment or sometimes the best option is to have no treatment.

What happens if I do not get treatment?

The risk is that the Vascular Malformation will bleed again. If no treatment is advised by the doctors, this is the safest option for you. Two consultant neuroradiologists would have reviewed your scans and angiogram (if you have had one) and discussed your case with the consultant neurosurgeon.

What happens prior to treatment?

You will need to be on bed rest until told that it is safe for you to get up to the commode. It is very important that you comply with this for your safety, as it maintains a constant pressure within the brain.

You may have a drip running. This is to ensure that you are getting enough fluids, especially if you are 'nil by mouth' or are feeling sick. Good hydration is important.

You may have a urinary catheter inserted to monitor your fluid balance. The nurses and doctors need to make sure you are having enough fluid going in but also that the amount of urine you pass out is in balance. (Not too much and not too little).

Make sure that you take regular pain killers and ask your nurse for more if needed. (Some painkillers are prescribed 'as needed' and so you will need to let the nurses know if you need them.) If you are feeling sick, please ask the nurses to give you anti-sickness medicine.

What happens after treatment?

If you have a craniotomy you will be in Intensive Care for at least a day or two, maybe longer.

Make sure you take regular pain killers and ask your nurse for more if needed as mentioned above. Headache is common and will continue for weeks or months but will lessen.

You will have a urinary catheter in place to monitor your fluid balance as discussed in the previous section.

Get lots of rest. You will feel very tired. Do as little as you feel able. You are not being lazy. All-consuming fatigue is common and may continue, although it does lessen within a few months.

Let your nurse know if you have any unusual symptoms (visual changes / feeling muddled / increasing headache / sudden headache / 'funny feeling' in legs or arms). Aim for 'normal' bowel movements although you will probably need to take laxatives or have suppositories, until things settle. The nurses and doctors will monitor that you have had your bowels open and give medication as needed. Please let them know if you feel constipated.

You may see the physiotherapist, occupational therapist and speech therapist during your stay, depending on your symptoms.

You will probably be in St George's Hospital for 10-14 days. Depending on your recovery, you will either go home from here or return to your local hospital (if St George's isn't your local hospital) for a period of recovery.

What to expect

- Time off work. Everyone recovers differently but we expect that you will need at least a month off work. It is possible that you will require longer than this, depending on your recovery. This should be discussed with your consultant.
- Fatigue. You may continue to feel tired for many months.
- Headache. This can persist for several weeks but should reduce over time.
- No driving. You must let the DVLA know about the bleed and the treatment given.

(The Vascular Malformation booklet has more information)

Role of the Clinical Nurse Specialist

The Neurovascular Clinical Nurse Specialists aim to see each patient daily whilst in hospital. They will check up on how you are doing and answer any questions you might have. They are a link between you and the medical team. Along with the ward nurses, they will discuss with you whether you need physiotherapy, occupational therapy or speech therapy. They will also arrange a telephone clinic appointment with you in a few months after discharge to make sure that things are going well. You will receive a letter in the post if they are planning on ringing you.

If you need to speak with the Neurovascular Clinical Nurse Specialists, their contact details are on the bottom of this leaflet.

Is there anything I can do to help myself?

There are several things you can do to improve your health. Stopping smoking (there are smoking cessation specialists within the hospital or your GP can refer you). Reducing alcohol intake – your GP will be able to help with this if needed. Ensure high blood pressure is being monitored and treated.

Useful sources of information

Brain & Spine Foundation
Brain and Spinal Injury Charity
The Brain Charity
The Stroke Association
Headway

Contact us

If you have any questions or concerns about anything, please contact Helen Wood or Jan Hickin (Clinical Nurse Specialists) 07920 456725 (Monday to Friday, 7.30am to 4pm). Out of hours, please contact the ward on which you were during your admission.

Brodie Ward – 020 8725 4646

McKissock Ward – 020 8725 4644

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: NES_VM_04 **Published:** September 2025 **Review date:** September 2027



