

WEB device for treating brain (intracranial) aneurysms

This leaflet explains more about the WEB device, including the benefits, risks and any alternatives and what you can expect when you come to hospital. If you have any further questions, please speak to a doctor or nurse caring for you.

What is an aneurysm and what is a WEB device?

An aneurysm is a bulge in a blood vessel caused by a weakness in the blood vessel wall.

A WEB device is a small basket made of very fine wire mesh which is used to plug an aneurysm.

The WEB device reduces the blood flow within it and prevents further bleeding. This lets the aneurysm clot off without coils or stents.

Why should I have the WEB device?

The aim of the WEB device is to prevent the risk of your aneurysm bursting.

It allows us to treat large, wide-necked aneurysms which may be difficult to treat otherwise.

The use of a WEB device does not prevent us trying further treatments later if needed.

What are the risks?

All treatments and procedures carry risks.

As each case carries a different risk, we will try to estimate your personal risk of having a WEB device in our discussions with you.

As these devices are still quite new, we don't know how they will perform long term. We can always try other treatments later.

You will need a general anaesthetic to have the WEB device put in. A general anaesthetic has its own risks which your anaesthetist will talk you through. It is important to tell your doctor if there is any chance you might be pregnant.

The risks of the procedure to fit the WEB device include:

- The use of X-rays during the procedure presents a very small risk of hair loss, or very rarely, the development of a tumour elsewhere in the body. You will be given as low a dose of radiation as possible.
- A contrast dye is injected into the arteries so the blood vessels show up on the X-ray. There is a small risk of an allergic reaction to this dye or damage to kidneys.
- You may need to take tablets to make the blood thinner and less likely to clot for a few days before the procedure and some months afterwards. These tablets can increase the risk of bleeding in other areas of the body and can irritate the stomach. Make sure you tell your consultant if you have had a stomach ulcer in the past.
- All procedures involving the blood vessels of the brain carry a small risk of stroke. The effect of a stroke can range from a minor problem which gets better, to a severe disability involving movement, balance, speech or vision. There may even be a threat to life. We estimate that between three and seven people in every 100 having this procedure

will have this problem, which will usually show up during or straight afterwards or in the next few days while you are recovering in hospital.

- An absorbable sealing plug is usually placed in the femoral artery in the groin during the procedure which can often cause bruising and sometimes bleeding in the groin. It is rarely serious but can go on for a few hours. Very occasionally there is damage to the blood vessel in the leg which needs a further operation. You will need to be monitored carefully in hospital for the first few days to control your blood pressure and blood clotting.
- Headaches are quite common after aneurysm treatments, probably due to clotting inside the aneurysm as part of the healing process. This may go on for some time.

What will happen if I choose not to have the WEB device treatment?

We will continue to offer you the best care possible, based on the best current evidence.

Your case will have been discussed by a team of neuroradiologists, neurosurgeons and neurologists who have agreed that the WEB procedure is your best option.

It is important you fully understand the procedure, what it means for you and the alternative treatments below. You do not have to follow the advice given, and if you are unhappy, a full discussion with the team can be arranged. You can also seek a second opinion.

Whatever you decide it will not affect the standard of care you receive.

Are there any alternatives?

There are several treatment options for aneurysms.

The location, size and shape of the aneurysm can make a certain treatment safer than others, so these other treatments may be higher risk.

Your consultant or a senior member of the team will talk through all the options with you.

Alternative treatments include:

- Clinical follow-up and magnetic resonance imaging (MRI) or computerised tomography (CT) scans, together with blood pressure control and advice on lifestyle changes (such as giving up smoking). This option carries a risk of the aneurysm bleeding or causing other problems in the future.
- Clipping the neck of the aneurysm with a metal clip during an operation. This procedure is done under general anaesthetic and the skull is opened to reach the aneurysm.
- Passing a catheter (a fine tube) through the blood vessels and 'packing' the aneurysm from the inside with very fine metal coils. Coils don't work with some aneurysms due to their shape. Sometimes a wire tube called a stent is also needed to line the blood vessel wall and hold the coils in place. Medicine to thin the blood is needed for some time before this and it leaves something in the blood vessel. The WEB device allows the aneurysm to clot without coils or stents.

How can I prepare for treatment with the WEB device?

Once you have decided on the treatment, you will have a pre-anaesthetic assessment and will be given a range of tests including blood tests, depending on your medical history.

You will be brought into hospital either the day before or the morning of your procedure.

The procedure is performed under a general anaesthetic so you will be unconscious or 'asleep'. Your anaesthetist will talk to you about pain relief and what you can expect when you have a general anaesthetic.

You will need to not eat anything (fast) for some hours before your procedure. Your anaesthetist will tell you at what time you must stop eating and drinking.

You should still take all of your medications at the normal times with a sip of water.

A member of staff, usually your nurse, will go with you to the radiology department.

Asking for your consent

It is important that you feel involved in decisions about your care. If you decide to go ahead with treatment, by law we must ask for your consent. You will be asked to sign a consent form to say that you agree to have the treatment and understand what it involves. You can withdraw your consent at any time, even if you have said 'yes' previously. If you would like more details about our consent process, please ask for a copy of our policy.

Staff will explain all the risks, benefits and alternatives before they ask you to sign the consent form. If you are not sure about any aspect of your proposed treatment, please do not hesitate to speak with a senior member of staff again.

What happens during treatment?

The procedure usually takes between one and three hours and is performed by a neuroradiologist in an operating theatre in the neuroradiology department.

A team of radiologists, radiographers, anaesthetists and nurses will monitor you closely throughout.

After your anaesthetic, the neuroradiologist will place a flexible plastic tube into the femoral artery (the large artery in your groin).

A catheter is then passed through this tube into the main artery in the body (the aorta) and then into an artery to the brain. A second, smaller catheter is put inside the first catheter and sometimes a third catheter is put inside the second catheter. The smallest catheter then goes into the aneurysm.

The WEB device is pushed through this catheter and into the aneurysm and usually immediately reduces the amount of blood getting into the aneurysm.

Sometimes a few WEB devices are needed if the aneurysm is very large.

Once the radiologists are happy, the catheters are removed and the blood vessel in the groin is sealed with an absorbable plug, so you won't need any stitches.

Will I feel any pain?

You may have some bruising and feel some discomfort in the groin.

We can give you pain relief for this if you need it.

What happens after treatment?

After the procedure you will spend some time in the Intensive Care Unit (ICU) or the High Dependency Unit (HDU) before being transferred back to your ward. On the ICU or HDU you will have a high level of monitoring.

You will need to stay in hospital for a minimum of one to five days after the procedure, until you are walking around and feeling back to normal.

You should plan to take at least a week, possibly two, off work and arrange to have someone to stay with you when you first return home.

What do I need to do after I go home?

Everyone is different and people recover at different rates.

It is common to have headaches in the days and weeks after your procedure, while the aneurysm is shrinking. You will be given pain killers to help if needed.

If your headache becomes severe or you experience nausea, vomiting, drowsiness or severe stiffness in your neck go straight to your emergency department (ED, A & E, Casualty) and ask staff to do a CT scan. Tell them that you have had the procedure.

Will I have a follow-up appointment?

You will have a follow-up scan or angiogram to check on your aneurysm, usually six months after your treatment with the WEB device.

This will then be followed by an outpatient appointment with your consultant.

Useful sources of information

www.brainandspine.org.uk/helpline

Contact us

If you have any questions or concerns about treatment with the WEB device, please contact one of our neurovascular nurse specialists through the hospital switchboard on 020 8672 1255 and ask them to bleep number 7711 (Monday to Friday, 9am to 5pm). You can also speak to your consultant's secretary through the switchboard.

In an emergency, go to your local ED (A&E) who can talk to the St. George's Hospital neurosurgical team.

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 9am and 5pm, Monday to Friday in the main corridor between Grosvenor and Lanesborough Wing (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

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