

Glossary of terms

Aneurysm: A weak bulging area in an artery wall.

Angiogram: A study showing arteries and veins by injecting contrast dye through a catheter and taking pictures using x-ray.

Balloon: An inflation device intended to temporarily block flow in a vessel and protect the artery adjacent to an aneurysm.

Catheter: A thin flexible tube for insertion into a blood vessel through which devices can be introduced or contrast dye can be injected.

Cerebral Angiogram: A study showing arteries and veins in the brain by injecting contrast dye through a catheter and taking pictures using x-ray.

Coiling: Placing coils in an aneurysm to remove the aneurysm from circulation and prevent rupture.

Coils: Small platinum coils used to occlude (fill) aneurysms. Coils are attached to a wire which is fed through a catheter and into the aneurysm.

Craniotomy: Surgical procedure where a section of skull is temporarily removed.

Embolisation: Blockage of a blood vessel or aneurysm so blood can no longer flow through.

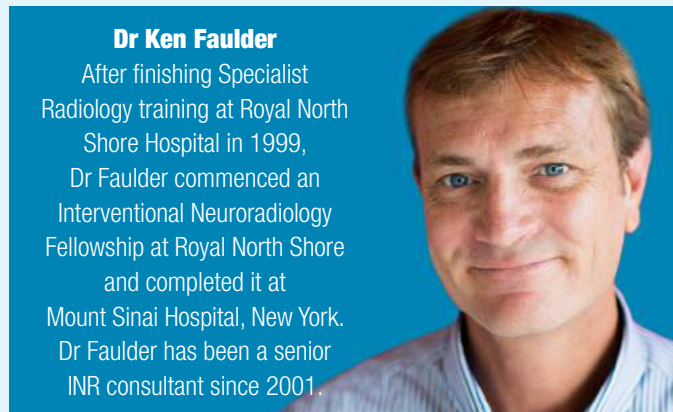
Endovascular: Within the vascular system (arteries and veins)

Fusiform: A shape of aneurysm where the entire circumference of the vessel balloons out.

Stent: A cylindrical device made of metal wire that is left in an artery adjacent to a wide necked aneurysm to prevent coils leaving the aneurysm.

Stent assisted coiling: Using a stent in the artery adjacent to the aneurysm and placing coils in the aneurysm to exclude the aneurysm from circulation. The stent remains in the artery and the patient requires blood thinning medication to prevent clots.

Subarachnoid Haemorrhage (SAH): Bleeding into the compartment surrounding the brain, often caused by the rupture of a cerebral aneurysm.



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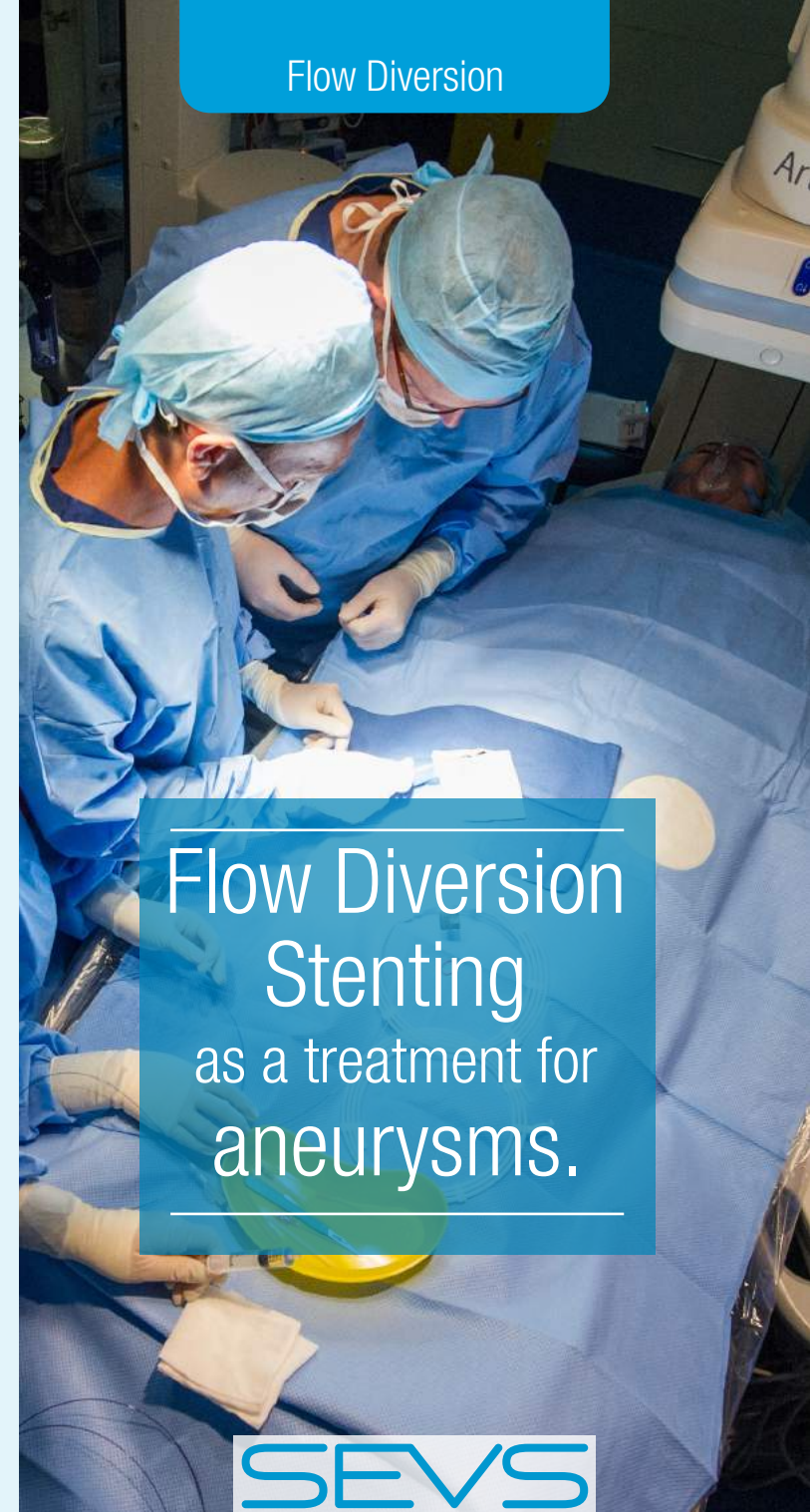
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Flow Diversion



Flow Diversion
Stenting
as a treatment for
aneurysms.



Types of Aneurysms

Aneurysms come in many shapes and sizes - for instance berry aneurysms, fusiform aneurysms, wide necked aneurysms and giant aneurysms. There are three main treatment options; active surveillance, open surgery or endovascular treatment with many factors influencing the decision about which treatment is most suitable.

Aneurysm treatment?

Active surveillance may be suitable in some aneurysms, particularly smaller anterior circulation aneurysms. Our doctors will discuss with you if this is the most suitable option.

Endovascular aneurysm treatment options include coiling, balloon assisted coiling, stent assisted coiling and now a revolutionary new way, flow diversion stenting.

Coils are used in regular shaped small neck aneurysms, where coils are placed in the aneurysm to exclude the aneurysm from circulation.

If the neck is too wide, the coils are unable to stay in place without a mechanical barrier in the artery. A balloon or a stent can be used for this purpose.

A balloon is an inflation device intended to temporarily block flow in a vessel and protect the artery adjacent to an aneurysm.

A stent has the same purpose but it is a cylindrical device made of metal wire that is left in an artery adjacent to a wide necked aneurysm.

What is Flow Diversion Stenting?

Fusiform and giant aneurysms are more complex and are sometimes not suitable for surgery or endovascular coiling.

Flow diversion stenting allows an increased range of aneurysms to be treated by minimally invasive techniques.

It uses a stent with about three times more struts (wires) than a normal stent. This is placed in the artery adjacent to the aneurysm.

This has the effect of diverting the flow out of the aneurysm back into the vessel.



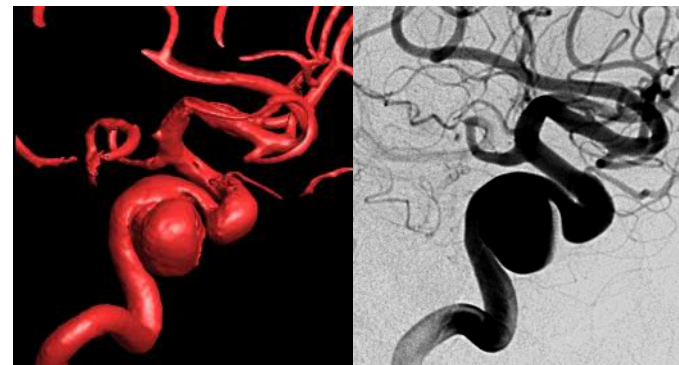
Reducing flow of blood into the aneurysm then shrinks the size of the aneurysm and allows for any symptoms due to the aneurysm pressing on nerves to resolve.

The flow divertor allows healing of the weakened artery and prevents bleeding of the aneurysm.

Flow diversion stenting does require special pre-operative medication, which usually consists of aspirin and clopidogrel taken daily, starting 5 days before treatment. The effectiveness of this medication is tested prior to treatment.

About your treatment

In consultation with the neurosurgeon, one of our INR specialists will discuss the risks and benefits of each treatment option and recommend the best option for you.



3D of Aneurysm and Giant Aneurysm before operation



Flow diversion stent in place and after operation