Here to help

Our **Health Information Centre (HIC)** provides advice and information on a wide range of health-related topics.

We also offer:

- Services for people with disabilities.
- Information in large print, Braille and Easy Read formats.
- Information on audio tape and CD-ROM.
- A service to provide information in a language other than English.

Contact the HIC on: 01392 402071

For RD&E services log on to: www.rdehospital.nhs.uk

Smoking is not allowed by anyone on any of the RD&E sites.

For information on how to stop smoking, see your GP before coming into hospital or phone the **Stop Smoking Service** on **0845 111 1142**. This is a local service run by NHS Devon.

Patients and visitors involved in, or witness to, an accident on Trust property are encouraged to report it immediately to a staff member so that the matter can be properly reported and dealt with.

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Designed by the Graphics Department, RD&E

Posterior Cervical Surgery

Royal Devon and Exeter NHS Foundation Trust

Patient Information

Posterior Cervical Surgery

Respond Deliver & Enable

If you have any questions regarding the operation or what to expect afterwards please do discuss them with either the ward nurses or a member of your consultant's team.

Contact numbers

Mr. Chan's secretary	01392 403696
Mr. Hutton's secretary	01392 404773
Mr. Khan's secretary	01392 406352
Mr. Clarke's secretary	01392 406352

Following your recent MRI scan and consultation with your spinal surgeon, you have been diagnosed with a narrowing of your cervical spinal canal (cervical stenosis). This is usually related to wear and tear of the spine. The spinal cord is compressed by bone spurs (osteophytes) that consequently narrow the spinal canal and this pressure can damage the spinal cord (myelopathy).

Myelopathy is a generally progressive condition that develops slowly and is most commonly caused by spinal stenosis. Symptoms may not progress for years and then difficulties with coordination may suddenly increase.



MRI image showing cervical stenosis

Most patients first visit their doctor with symptoms of spinal stenosis at about the age of 60 or so. Often it is the symptoms of arm pain, tingling, weakness or numbness that prompts someone with this condition to seek medical treatment and then the myelopathy is discovered through medical history and physical examination.

Unfortunately, most conservative treatments (manipulation, physiotherapy, medication or injections) are unlikely to be of much benefit and the symptoms rarely improve without surgery to relieve the pressure from the affected area.

About the operation

The objective of surgery is to remove the bony arch (lamina) off the back of the spine to give the spinal cord more room. The operation is performed under general anaesthetic (so you are fully asleep).

Because surgery is performed with the patient lying on their front, it is necessary to apply temporary pins in the skull, attached to a special clamp, which enable the patient's head to be securely suspended over the operating table. These pins are removed immediately after the procedure (before you wake up).

First, the skin incision is made in the midline of the back of the neck and the muscles are lifted off the bony arch (lamina). A highspeed burr (like a dentist's drill) can be used to make a trough in the lamina. The lamina can then be removed to allow the spinal cord to 'float' backwards to give it more room.

The results of the surgery are variable since some people have more extensive disease than others. The main aim of surgery is to stop the progression of the condition. After surgery some patients may regain:

Driving

When to resume driving after surgery does depend on the individual situation. If you have no altered sensation or weakness in your legs or hands and you can move your head around freely, then you may resume driving following surgery if you feel safe to do so. This will usually be 6 weeks after surgery.

Recreational activities

Walking is the best activity to do following your surgery. Any other sports should be avoided until you can discuss them with your consultant during your follow-up appointment.

Lifting and carrying

Heavy lifting and carrying should be avoided for 12 weeks.

Work

You will usually be off work for 6 weeks. This may be longer depending on your type of work. The hospital can give you a certificate or you can ask your GP.

Follow-up

We will send you an appointment to attend the clinic 6-8 weeks after your operation.

Usually on the first day after your operation your physiotherapist will help you out of bed. They will also show you the correct way to move safely.

Going home

You will normally be allowed to leave hospital when you and your physiotherapist are happy with your mobility. This tends to be 1-4 days after your operation.

Please arrange for a friend or relative to collect you, as driving yourself or taking public transport is not advised in the early stages of recovery. If you are likely to require a hospital car please inform one of the nurses as soon as possible.

Wound care

Your wound may be closed with clips or a suture that runs beneath the skin. You may shower when you get home but bathing should be avoided for two weeks, until the wound is completely dry. If a dressing is required then a simple dry dressing from the pharmacist (chemist) is sufficient.

Please contact your GP to report any of the following:

- Redness around the wound
- Wound leakage
- High body temperature

The ward staff will inform you if you need to see a district nurse for any attention to the wound.

- modest improvement in their hand function and walking capabilities;
- less numbness in their hands. (If there is a lot of numbness prior to the surgery, it probably won't go away completely.)

If the surgery simply prevents progression of the spinal cord damage (myelopathy) and there is no loss of function due to the surgery, both the patient and the surgeon should consider it successful.

Sometimes, to add stability to the spine following decompression, a cervical plate or rod can be placed on the side of the spine and attached using screws. The screws are angled out into the bone,

away from the spinal canal, into what is known as the lateral mass. This is often in conjunction with a fusion using bone graft.



X-ray showing rod and screws in cervical spine

To achieve a spinal fusion, a bone graft is used to connect two bones together. The patient's own bone will then grow into the bone graft and join the graft bone as its own.

There are several techniques to get the bone graft needed for spinal fusion:

- Patient's own bone (autograft bone): this is usually taken through an incision over the iliac crest (pelvis);
- Artificial bone (bone substitutes).

Risks and complications

As with any form of surgery, there are risks and complications associated with this procedure. The principal risk is deterioration in the function of the spinal cord.

Other potential risks include:

- damage to the nerve root and the outer lining or covering which surrounds the nerve roots (dura). This could result in neck or arm pain, weakness or numbness, leaking from the wound, headaches or meningitis;
- recurrent symptoms as a result of scarring;
- infection;
- blood clots (thromboses) in the deep veins of the legs or lungs;
- bleeding;

- problems with positioning during the operation including skin and nerve pressure problems and eye complications including very rarely blindness;
- placement of the screws involves some risk to the vertebral artery and the exiting nerve root;
- possible complications associated with taking out bone graft can include graft site pain;
- there are also very rare but serious complications that in extreme circumstances might include: damage to the spinal cord and permanent paralysis, stroke, other anaesthetic or medical problems or death.

What to expect after surgery

Immediately after the operation you will be taken to the recovery ward on your bed, where nurses will regularly monitor your blood pressure and pulse. Oxygen will be given to you using a facemask for a period of time to help you to recover from the anaesthetic. You will have an intravenous drip for about 24 hours or until you are able to drink again after the surgery.

A drain (tube) may come out of your wound if there has been significant bleeding during the operation – this prevents any excess blood or fluid from collecting there. This will be removed when the drainage has stopped (usually 24 hours later).

You will have some discomfort or pain after surgery but the nursing and medical staff will help you to control any pain with appropriate medication.