ANTERIOR CERVICAL VERTEBRECTOMY

What is an Anterior Cervical Vertebrectomy?
Through an incision in the front of the neck the vertebra is removed. This may be at one or more levels. This is a removal of the middle component of the vertebral body.

What is a Fusion?
This is where after the bone and disc are removed something is placed into the space left behind to link the vertebra above and below. The aim is to make them join (fuse) together. This to help prevent a recurrence of your symptoms as well as to re-align the shape of the cervical spine. Sometimes a metal plate is placed flush on the vertebrae to keep the bones still until the fusion occurs at about 3 months.

What are the Reasons for the Surgery?
1. Pain/weakness/numbness in the arm
2. Difficulty walking and clumsy hands
The above can be from cervical disc prolapse or boney spur affecting the nerves or spinal cord.
3. Fracture
4. Boney tumour
5. Infection around the spinal cord or in the bones of the neck

How is it Performed?
In the operating theatre you are given a general anaesthetic. Incisions on the neck and hip are marked out. They are prepared with anti-septic. You are covered in drapes so that only the incisions can be seen. Local anaesthetic is injected and then the skin is cut. Initially we cut the muscle on the front of the neck and dissect down to the front of the vertebrae. The carotid artery (main artery to the brain) is moved to one side and the larynx (voice box) and oesophagus (gullet) are moved to the other side. These are held out of the way with a retractor. The abnormality is then removed and any spurs on the back of the vertebrae removed. If the holes for the nerves are narrow these are opened up with a drill.

The empty space is prepared for the graft which is cut from a bone above the hip (sometimes metal, plastic, or carbon fibre is used). This is then placed in the empty space and a metal plate screwed over the front to hold everything in place. All bleeding is stopped. Everything is then repositioned the way we found it. The skin is then closed either with dissolvable sutures or a nylon suture.

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WHAT HAPPENS NEXT?

You will wake up in recovery and after about 1 hour you will be transferred to the ward. You will be wearing a cervical collar. The nursing staff will be continually checking your pulse/blood pressure/limb strengths and level of alertness looking for any changes to indicate a complication. During the first night on the ward you will be woken for these observations. You will have analgesia from the drip that you control with a button to push (this will be explained pre-operatively).

Sometimes you will have difficulty passing water and you may require a catheter (this may have been inserted during the operation).

In the next day or so the drip in your arm will be removed. Usually this is the day after surgery. The day after surgery you will be encouraged to go for a walk. Gradually over the next two days you will be able to get around as normal.

When you are comfortable you will be able to go home. You will have a Post op X-ray of your neck. The sutures are usually dissolvable, if not they are removed 3-5 days after surgery.

HOW LONG WILL YOU BE IN HOSPITAL

Unless you have been admitted as an emergency you may be admitted on the day of surgery or the day before. You will fast from midnight on the day of surgery.

You will be discharged about 3-5 days post-operatively. On discharge you will be able to perform most tasks of daily living (e.g. showering/dressing/etc.) depending on how quickly you recover from any preoperative disability you may require rehabilitation.

WHAT HAPPENS WHEN YOU GO HOME?

You will need to wear a collar for 6 weeks to 3 months. You will not be able to drive for at least 6 weeks. You will not be able to lift anything heavy.

You may be on anti inflammatory drugs

You will require some analgesia (mostly for the hip wound)

You will have an X-ray prior to your review appointment. You will be reviewed at 4 - 6 weeks post-operatively.

WHAT ARE THE RISKS?

Discuss these and others with your surgeon

THE COMMON RISKS ARE

- Infection (treated with antibiotics)
- Hoarse voice
- Difficulty swallowing/damage to oesophagus
- Post operative blood clot requiring drainage
- Damage to a nerve may cause arm pain/weakness/numbness
- Damage to the spinal cord to produce paraplegia
- Failure of the fusion / Graft collapse or graft resorption
- Pain/infection/numbness in hip where graft comes from
- Stroke / Death (very unlikely)
- Clot in the legs (can travel to the lungs [uncommon])
- Complication not related directly to the surgery e.g. Pneumonia
- Heart attack
- Urine infection

WILL YOUR SYMPTOMS GET BETTER?

The reason for the operation is usually to improve or completely remove your symptoms. Sometimes no improvement can be expected and the surgery is to prevent further deterioration (you should discuss this with your surgeon).

If you have severe problems from degenerative spinal cord compression then the operation is primarily to prevent you getting worse but most patients will get significant improvement (some unfortunately will not improve). If the pressure is from tumour then recovery of the spinal cord is hoped for.

If you have severe arm pain/weakness and numbness then you should wake up with improvement in your arm pain. The weakness depending on its severity should improve next, sometimes this will not improve completely and may take a few months. The numbness is the last to improve and this is usually incomplete.

YOU WILL BE ASKED TO SIGN A CONSENT FORM TO SAY THAT YOU UNDERSTAND THE RISKS. IF YOU ARE NOT SURE ASK BEFORE YOU SIGN.