OS21 Ulnar Nerve Release

What is ulnar nerve compression?
Ulnar nerve compression is a condition where there is increased pressure on the ulnar nerve that goes round the back of your elbow. Your surgeon has recommended an operation called an ulnar nerve release. However, it is your decision to go ahead with the operation or not. This document will give you information about the benefits and risks to help you make an informed decision. If you have any questions that this document does not answer, you should ask your surgeon or any member of the healthcare team.

How does ulnar nerve compression happen?
The ulnar nerve goes round the back of the inner side of your elbow (sometimes called your ‘funny bone’). It then goes through a tight tunnel between the forearm muscles (see figure 1). If the tunnel becomes too tight it can compress (squash) the nerve. This usually causes numbness in your ring and little fingers. The symptoms are often worse if you keep your elbow bent for some time.
If your symptoms are less obvious, your surgeon may recommend further tests to confirm the diagnosis. Ulnar nerve compression is sometimes caused by an abnormal band of muscle stretched over the nerve, or arthritis of the elbow. However, for most sufferers there is no particular cause.

What are the benefits of surgery?
Surgery helps to prevent further damage to the nerve. If you have the operation early enough, the numbness in your hand may get better.

Are there any alternatives to surgery?
If your symptoms are mild and happen mostly at night, a splint to hold your elbow straight while you are in bed often helps. In many cases, it is best to have an operation to release the nerve to prevent permanent nerve damage.

What will happen if I decide not to have the operation?
If the compression of the nerve is severe for a long time, and you do not have any treatment, the nerve may become permanently damaged. This makes some of the small muscles in your hand waste away. If this happens, you will have difficulty using your hand for everyday things such as doing up buttons or holding a pen. An ulnar nerve release operation at this stage will not be able to put right the damage already done.
What does the operation involve?
You should remove any rings from your hand before you come into hospital. A variety of anaesthetic techniques are possible. Your anaesthetist will discuss the options with you and will recommend the best form of anaesthesia for you. The operation usually takes about twenty minutes.
Your surgeon will make a cut over the back of your elbow on the inner side. They will cut any tight tissue that is compressing the nerve. Sometimes your surgeon will need to remove a piece of bone, or move the nerve so that it lies in front of the elbow. Your surgeon will discuss this with you.
At the end of the operation, your surgeon will close the skin with stitches or clips.

What should I do about my medication?
You should continue your normal medication unless you are told otherwise. Let your surgeon know if you are on warfarin or clopidogrel. Follow your surgeon’s advice about stopping this medication before the operation.

What can I do to help make the operation a success?

• Lifestyle changes
If you smoke, try to stop smoking now. Stopping smoking several weeks or more before an operation may reduce your chances of getting complications and will improve your long-term health. For help and advice on stopping smoking, go to www.gosmokefree.co.uk. You have a higher chance of developing complications if you are overweight. For advice on maintaining a healthy weight, go to www.eatwell.gov.uk.

• Exercise
Regular exercise can reduce the risk of heart disease and other medical conditions, improve how your lungs work, boost your immune system, help you to control your weight and improve your mood. Exercise should help to prepare you for the operation, help with your recovery and improve your long-term health. For information on how exercise can help you, go to www.eidoactive.co.uk. Before you start exercising, you should ask a member of the healthcare team or your GP for advice.

What complications can happen?
The healthcare team will try to make your operation as safe as possible. However, complications can happen. Some of these can be serious. You should ask your doctor if there is anything you do not understand. Any numbers which relate to risk are from studies of people who have had this operation. Your doctor may be able to tell you if the risk of a complication is higher or lower for you. The complications fall into three categories.
1 Complications of anaesthesia
2 General complications of any operation
3 Specific complications of this operation

1 Complications of anaesthesia
Your anaesthetist will be able to discuss with you the possible complications of having an anaesthetic.

2 General complications of any operation
• Pain, which happens with every operation. The healthcare team will give you painkillers to control the pain.
• Bleeding during or after surgery. This is not usually serious but can occasionally cause a painful swelling (haematoma) that takes a week or two to settle.
• Infection in the surgical wound. This usually settles with antibiotics but may occasionally need another operation.
• Unsightly scarring of the skin.
3 Specific complications of this operation

• **Continued numbness** in your ring and little fingers, caused by damage to the ulnar nerve or one of its branches before or during the operation. This can be temporary or permanent.

• **Return of numbness**, which is caused by scar tissue that forms after the operation (risk: 1 in 8). If this happens, you may need another operation to release the nerve again.

• **Severe pain, stiffness and loss of use of the arm** (Complex Regional Pain Syndrome). This is rare and the cause is not known. If this happens, you may need further treatment including painkillers and physiotherapy. The hand can take months or years to get better.

How soon will I recover?

• **In hospital**

After the operation you will be transferred to the recovery area and then to the ward. You will have a bandage on your elbow and may have to wear a sling.

You should be able to go home the same day. However, your doctor may recommend that you stay a little longer. If you are worried about anything, in hospital or at home, ask a member of the healthcare team. They should be able to reassure you or identify and treat any complications.

• **Returning to normal activities**

Your surgeon will tell you when you can return to normal activities. You should keep your hand lifted up for the first couple of days. It is important to gently exercise your fingers, elbow and shoulder to prevent stiffness.

After the first couple of days the dressing can be reduced but you should keep the wound clean and dry until any stitches or clips are removed.

Regular exercise should help you to return to normal activities as soon as possible. Before you start exercising, you should ask a member of the healthcare team or your GP for advice.

Do not drive until you are confident about controlling your vehicle and always check with your doctor and insurance company first.

• **The future**

In some people, symptoms of ulnar nerve compression recover quickly after the operation. However, recovery can be slower or less complete because of damage caused by pressure on the nerve before the operation.

Your symptoms may continue to improve for up to six months. If you had wasting of the small muscles of your hand before the operation, this is unlikely to get better. However, the operation should prevent further damage to the nerve.

Summary

Ulnar nerve compression causes numbness in your ring and little fingers. An ulnar nerve release should improve your symptoms and prevent permanent nerve damage.

Surgery is usually safe and effective. However, complications can happen. You need to know about them to help you make an informed decision about surgery. Knowing about them will also help to detect and treat any problems early.
Further information
- NHS smoking helpline on 0800 169 0 169 and at www.gosmokefree.co.uk
- www.eatwell.gov.uk – for advice on maintaining a healthy weight
- www.eidoactive.co.uk – for information on how exercise can help you
- www.aboutmyhealth.org - for support and information you can trust
- Arthritis Research Campaign on 0870 850 500 and at www.arc.org.uk
- Reflex Sympathetic Dystrophy and Complex Regional Pain Syndrome UK at www.rsd-crps.co.uk
- American Academy of Orthopaedic Surgeons at www.aaos.org
- NHS Direct on 0845 46 47 (0845 606 46 47 - textphone)
- www.eidohealthcare.com

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Local information
You can get information locally from the Patient Advice and Liaison Service (PALS) on 02380 798 498 or email PALS@suht.swest.nhs.uk.
You can also contact:

Tell us how useful you found this document at www.patientfeedback.org

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