

### **OS21 Ulnar Nerve Release**

### Expires end of March 2021

#### **Further information**

You can get more information locally by contacting the hospital at: The Whittington Hospital Magdala Avenue London N19 5NF 020 7272 3070 (main switchboard 24 hours)

You can get more information from www.aboutmyhealth.org Tell us how useful you found this document at www.patientfeedback.org













### Information about COVID-19 (Coronavirus)

On 11 March 2020 the World Health Organization confirmed COVID-19 (coronavirus) has now spread all over the world (this means it is a 'pandemic'). Even though lockdown has been eased, there is still a risk of catching coronavirus. Hospitals have very robust infection control procedures, however, it is impossible to make sure you don't catch coronavirus either before you come into the hospital or once you are there. You will need to think carefully about the risks associated with the procedure, the risk of catching coronavirus while you are in hospital, and of not going ahead with the procedure at all. Your healthcare team can help you understand the balance of these risks. If you catch the coronavirus, this could affect your recovery and might increase your risk of pneumonia and even death. Talk to your healthcare team about the balance of risk between waiting until the pandemic is over (this could be many months) and going ahead with your procedure.

Please visit the World Health Organization website: https://www.who.int/ for up-to-date information.

## **Elective surgery**

Following the Covid-19 (coronavirus) pandemic, some operations have been delayed. As soon as the hospital confirms that it is safe, you will be offered a date for your operation. Your healthcare team can tell you about the risks of coronavirus. It is up to you to decide whether to have the operation or not. The benefits of the operation, the alternatives and any complications that may happen are explained in this leaflet. You also need to consider the risk of getting coronavirus while you are in hospital. If you would rather delay or not have the operation, until you feel happy to go ahead with it, or if you want to cancel the operation, you should tell your healthcare team.

If you decide to go ahead, you may need to self-isolate for the 14 days leading up to the operation (your healthcare team will confirm this with you). If you are not able to self-isolate, tell your healthcare team as soon as possible. You may need a coronavirus test 48 hours before the operation. This involves the healthcare team taking a nasal and throat swab (using cotton wool to take a sample from the surface of your nasal passage and throat). If your test is positive (meaning you have coronavirus), the operation will be postponed until you have recovered.

Coronavirus is highly contagious (meaning it spreads easily from person to person). The most common way that people catch it is by touching their face after they have touched a person or surface that has the virus on it. Try not to touch your face, especially if you have not washed your hands. Wash your hands for at least 20 seconds when you enter the hospital, at regular intervals after that, and when you move from one part of the hospital to another.

Be aware of social distancing. Chairs and beds are spaced apart. If your healthcare team need to be close to you, they will wear personal protective equipment (PPE). If you can't hear what they are saying because of their PPE, ask them to repeat it until you can. You may not be allowed visitors, or your visiting may be restricted.

Your surgery is important and the hospital and health professionals looking after you are very well equipped to perform it in a safe and clean environment. Guidance about coronavirus may change quickly — your healthcare team will have the most up-to-date information.

## What is ulnar nerve compression?

Ulnar nerve compression at your elbow (also called cubital tunnel syndrome) happens when there is increased pressure on the ulnar nerve, as it goes round the back of your elbow.

Your surgeon has recommended an operation called an ulnar nerve release (also called cubital tunnel 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 to make an informed decision. If you have any questions that this document does not answer, ask your surgeon or 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. If the tunnel becomes too tight it can cause pressure on the nerve, usually resulting in numbness in your ring and little fingers (see figure 1).

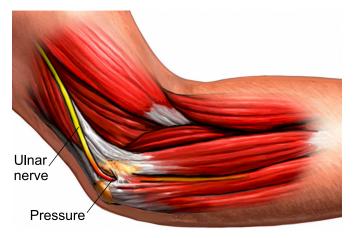


Figure 1
Ulnar nerve compression

The symptoms are often worse if you keep your elbow bent for some time.

If your symptoms are less typical, 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 your elbow. It can also happen to people who do repetitive activities for a long time. However, for most people there is no particular cause.

## What are the benefits of surgery?

The aim is 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.

For many people 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 and you do not have any treatment for a long time, the nerve may become permanently damaged. This makes some of the small muscles in your hand waste away and you may get permanent numbness in your hand, making it difficult to perform tasks such as doing up buttons and tying shoelaces. An ulnar nerve release operation at this stage may not be able to put right the damage already done.

## What does the operation involve?

Remove any rings from your hand before you come into hospital.

The healthcare team will carry out a number of checks to make sure you have the operation you came in for and on the correct side. You can help by confirming to your surgeon and the healthcare team your name and the operation you are having.

Various anaesthetic techniques are possible. Your anaesthetist will discuss the options with you. You may also have injections of local anaesthetic to help with the pain after the operation. You may be given antibiotics during the operation to reduce the risk of infection. The operation usually takes 30 to 45 minutes.

Your surgeon will make a cut over the back of the inner side of your elbow. They will cut any tight tissue that is compressing the nerve.

Your surgeon may need to remove a piece of bone, or move the nerve so that it lies in front of your elbow. They will discuss this with you. Your surgeon will close your skin with stitches or clips.

# What should I do about my medication?

Let your doctor know about all the medication you take and follow their advice. This includes all blood-thinning medication as well as herbal and complementary remedies, dietary supplements, and medication you can buy over the counter.

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

If you smoke, stopping smoking now may reduce your risk of developing complications and will improve your long-term health.

Try to maintain a healthy weight. You have a higher risk of developing complications if you are overweight.

Regular exercise should help to prepare you for the operation, help you to recover and improve your long-term health. Before you start exercising, ask the healthcare team or your GP for advice.

You can reduce your risk of infection in a surgical wound.

- In the week before the operation, do not shave or wax the area where a cut is likely to be made.
- Try to have a bath or shower either the day before or on the day of the operation.
- Keep warm around the time of the operation. Let the healthcare team know if you feel cold.

## What complications can happen?

The healthcare team will try to reduce the risk of complications.

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.

Some complications can be serious.

You should ask your doctor if there is anything you do not understand.

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

### General complications of any operation

- Pain. The healthcare team will give you medication to control the pain.
- Bleeding during or after the operation. This is not usually serious but can cause a painful swelling (haematoma) that takes 1 to 2 weeks to settle.
- Unsightly scarring of your skin (risk: 1 in 60).
- Infection of the surgical site (wound) (risk: 1 in 300). It is usually safe to shower after 2 days if you keep your wound dry and covered. Let the healthcare team know if you get a high temperature, notice pus in your wound, or if your wound becomes red, sore or painful. An infection usually settles with antibiotics but you may need another operation.

### 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 caused by scar tissue that forms (risk: 1 in 8). You may need another operation to release the nerve again.
- Numbness in a patch of skin just below the tip of your elbow caused by damage to small skin nerves during surgery (risk: 1 in 50) or scar tissue after the operation (risk: 1 in 20). This usually gets better but may be permanent.
- Tenderness of the scar caused by damage to small skin nerves during the operation. This usually gets better but may be permanent.
- Severe pain, stiffness and loss of use of your arm (complex regional pain syndrome). The cause is not known. You may need further treatment including painkillers and physiotherapy. Your arm can take months or years to improve. Sometimes there is permanent pain and stiffness.

#### 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 need 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 do go home the same day, a responsible adult should take you home in a car or taxi and stay with you for at least 24 hours. Be near a telephone in case of an emergency.

If you are worried about anything, in hospital or at home, contact the healthcare team. They should be able to reassure you or identify and treat any complications.

### Returning to normal activities

Do not drive, operate machinery or do any potentially dangerous activities (this includes cooking) for at least 24 hours and not until you have fully recovered feeling, movement and co-ordination.

If you had a general anaesthetic or sedation, you should also not sign legal documents or drink alcohol for at least 24 hours.

Your surgeon will tell you when you can return to normal activities. You may be told to rest your arm in a sling for a few days. It is important to gently exercise your fingers, elbow and shoulder to prevent stiffness.

After 2 days the dressing can be reduced but keep your wound clean and dry until any stitches or clips come out. The healthcare team will tell you if you need to have any stitches removed.

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

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

#### The future

For some people, symptoms of ulnar nerve compression improve quickly. 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 18 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 may improve your symptoms and should prevent permanent nerve damage.

Surgery is usually safe and effective but complications can happen. You need to know about them to help you to make an informed decision about surgery. Knowing about them will also help to detect and treat any problems early.

Keep this information document. Use it to help you if you need to talk to the healthcare team.

#### Acknowledgements

Reviewer: Prof Tim Davis ChM FRCS (Tr. & Orth.) Illustrator: Medical Illustration Copyright © Nucleus Medical Art. All rights reserved. www.nucleusinc.com

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