

Elbow Trauma Rehabilitation Programme

Information for patients

This leaflet explains what happens after an elbow injury or elbow surgery and the things you can do to help support your recovery. It includes exercises and advice on managing pain. If you have any queries or concerns, please do not hesitate to speak with your physiotherapy team.

Understanding your elbow joint

Your elbow is a complex joint made up of three bones: the **upper arm bone (humerus)** and the **forearm bones (ulna & radius)**. These join at your elbow to allow you to bend (flex) and straighten (extend) your elbow and rotate your forearm inwards (pronation) and outwards (supination).

These bones are held together at your elbow by a joint capsule and ligaments on the inner (medial) and outer part (lateral) of your joint which, together with your muscles, keep your elbow stable.



Elbow injuries

When you injure your elbow you can break (fracture) any of these three bones at your elbow and/or tear the ligaments and/or muscle tendons around the joint.

Signs and symptoms of injury

- Your elbow may look **bruised or swollen** and the bruising or swelling may track down your forearm.
- It is often **painful and it will be difficult to move it**.
- If you have any **tingling, numbness or weakness** in your hand or fingers, you must tell your doctor.

How are elbow injuries treated?

You usually have your arm put in a sling first. But if you have a significant fracture, your doctor may decide to put your arm in plaster.

If you need surgery, your doctor will discuss this with you and explain the operation.

After treatment – **with or without surgery** – you will need to start a **structured rehabilitation programme** to help you recover as well as possible. This will be created by your orthopaedic doctor and your physiotherapy team.

What happens if I need surgery?

Your orthopaedic doctor will discuss this with you. Surgery will repair the fractured bones and torn ligaments and hold them in place with implants so your body heals with your bones and ligaments in the correct position. If your bones are severely injured and cannot be put back together, you may need a complete or partial joint replacement.

If you need surgery you may be given an injection around the nerves of your neck known as a nerve block, as well as a general anaesthetic. This will numb your arm and help ease pain after the operation. You will not be able to move your arm while the nerve block is still working and the effects may take 24 – 48 hours to wear off before you can start elbow exercises. You will be given a sling for support.

What can I expect after an elbow injury?

Your elbow is one of the most sensitive joints in your body and even minor injury can make it stiff or difficult to move. If you have surgery, this can still also cause stiffness and loss of movement. With many elbow injuries, there is a high chance you may not be able to fully move your joint again.

Our aim is to get as much movement back into your elbow as possible, with your joint feeling stable and allowing you to do as much with it as you could before your injury. To do this, you will need to follow a rehabilitation programme with physiotherapy exercises.

Please remember: normal function does not necessarily need normal movement.

You can achieve full function without full movement. For example, you will still be able to do things such as getting dressed, doing the ironing, lifting heavy objects, playing high level tennis and so on even without being able to fully straighten your elbow.

If you have surgery, you may have pins and needles or numbness in your hand or fingers afterwards. This is likely to ease over days or weeks. But please tell your orthopaedic doctor so this can be monitored.

What are the aims of rehabilitation?

1. Improving your elbow movement

You will do a series of exercises (see p xx) to help gradually increase how much you can move your elbow joint. These exercises may have limitations to protect the break and/or injured ligaments, to allow them to heal. It is important to exercise regularly - hourly if possible - aided by painkillers, and not push yourself too far and cause more damage to your elbow.

Please learn these exercises before surgery so you can start them as soon as you are allowed.

2. Strengthening your elbow joint

Once you have made progress with moving your elbow, you can start strengthening exercises. You can then do these together with your movement exercises. You **must not** start these earlier than advised to by your orthopaedic doctor or physiotherapist.

What about my shoulder, wrist and fingers?

From the time of your injury and/or surgery, we advise you to keep your shoulder, wrist and finger joints moving to prevent them from getting stiff. We will also explain what not to do when doing your shoulder exercises (see page three), to protect you injured elbow.

How can I ease pain when I am doing the exercises?

Getting your elbow moving is the only thing that will help improve overall movement, stiffness and function. You are likely to have some discomfort or pain but you can ease this by taking pain killers, which will help you to do your physiotherapy exercises. Ask your orthopaedic doctor, GP or physiotherapist for advice on the best pain killers to take.

How often do I need to do the exercises?

Repetitions are how often you do a single movement. Do each exercise at least two – three times a day and repeat it 10 – 15 times, unless advised otherwise. You can do more if you are able.

We recommend you wear a **Tubigrip** tubular support bandage over your elbow after your bandage is removed. This helps the nerves that provide feedback (proprioception) from your elbow to recover, which helps elbow stability and movement.

Your orthopaedic doctor and/or physiotherapist will check your progress regularly and advise you if you need to alter any of the exercises you have been given.

Rehabilitation exercises

Exercises to improve movement

Exercise one: finger and wrist

Aim: To avoid wrist and finger stiffness and help elbow rehabilitation.

Timing: Start immediately after your injury and immediately after surgery (or immediately after the nerve block wears off).

Exercise: Squeeze your hand into a tight fist and then straighten your fingers fully and spread them out.



Exercise two: shoulder

Aim: To avoid shoulder stiffness.

Timing: Start immediately after your injury and immediately after surgery (or immediately after the nerve block wears off).

Exercise: With your uninjured arm, lift your injured arm within its sling from under the elbow.



Exercise three: overhead elbow flexion and extension (range of motion)

Aim: To minimise stiffness and improve/restore the flexion and extension movement of your elbow.

Timing: Start immediately after surgery. You can do this exercise with the nerve block working with support from your uninjured arm.

Exercise: Lie on your back with your injured arm up in the air in front of you.

This allows gravity to stabilise your elbow joint and help the muscles work.

Straighten your injured arm upwards towards the ceiling and then bend your elbow, allowing your hand to get closer to your head. Do this first using your uninjured arm to support the injured arm at the elbow or wrist. Repeat regularly.



Exercise four: Overhead forearm rotation (range of motion)

Aim: To minimise stiffness and improve/restore the rotational movement (pronation and supination) of your forearm.

Timing: Start immediately after surgery. You can do this exercise with the nerve block working with support from the uninjured arm.

Exercise: Lie on your back with your injured arm up in the air in front of you and bend your elbow to about 90 degrees. Rotate your forearm, changing between palm up and palm down. Do this at first using your uninjured arm to support the injured arm at the elbow or wrist. Repeat regularly.



Exercises to improve strength

Your orthopaedic surgeon and/or physiotherapist will advise you when they feel your movement has improved enough for you to start doing the strengthening exercises.

Your physiotherapist will provide you with these exercises.

Who can I contact with queries or concerns?

Beckenham Beacon Health Centre
Physiotherapy Team, tel: **01689 866660**

Princess Royal University Hospital (PRUH), Bromley
Physiotherapy Team, tel: **01689 863000**

For advice on exercises for elbow stiffness visit BESS
scan the QR code: www.bess.ac.uk/exercises-for-elbow-stiffness/



Produced in collaboration with the British Elbow & Shoulder Society (BESS).

MyChart

Our MyChart app and website lets you securely access parts of your health record with us, giving you more control over your care. To sign up or for help, call us on **020 3299 4618** or email kings.mychart@nhs.net. To find out more visit www.kch.nhs.uk/mychart

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