

Patient information

Bier's Block

Emergency Care

You have sustained a fracture (broken bone) in your wrist. The 'break' has caused the bone to move out of its normal place and it needs to be pulled into a better position. This is called 'manipulation' and can reduce the need for surgery.

In order to manipulate the break the doctor advises you to have a Bier's block to control the pain.

What is a Bier's block?

Is an local anaesthetic technique used to manipulate the fracture of your wrist. It may be performed by an emergency physician or the orthopaedic surgeon.

A special type of blood pressure cuff (tourniquet) will be put on your upper arm and will stay tight throughout the procedure until 20 minutes. Local anaesthetic is injected into a vein in your arm to numb the whole arm including where it is broken. Once the arm is numb the doctor will manipulate the fracture and apply a half plaster to hold the fracture. This procedure should take around 15-20 minutes after which the cuff will be removed.

What are the benefits of having a Biers block?

You will not require sedation and so will remain awake and alert throughout the procedure. Once the procedure has been performed and the position will be checked by repeating another x-ray. If reduction is satisfactory then you will be discharged home with appropriate follow up.

What are the risks of having a Biers block?

Most complications are rare and the symptoms are mild, ranging from dizziness and buzzing in the ears (tinnitus) to muscle twitching and occasionally loss of consciousness.

Serious side effects are extremely rare and include fits, low blood pressure, slowed breathing and changes in heartbeat, which may be life-threatening. To minimise these risks you will be closely observed and the whole procedure will be supervised by an experienced senior doctor.

If you are worried about any of these risks, please speak to your Consultant or a member of their team.

For more information, please ask for a copy of the Royal College of Anaesthetists Patient Information "You and Your Anaesthetic".

Are there any alternative treatments available?

An alternative to this is a different type of local anaesthetic called a 'haematoma block'. A haematoma is the medical term for bruise or collection of blood. This technique involves injecting local anaesthetic into the collection of blood that has formed around the broken bone. This alternative may have already been discussed with you, if you would like further information please ask the doctor in charge of your care.

What will happen if I decide not to have this done?

If you do not have this procedure the broken bone will not heal properly and this will lead to complications in the future. Complications include reduced movement of the wrist and hand, chronic pain and arthritis, all of these things mean you will not be able to use your hand and wrist normally.

When should you not have it done?

If any of the following apply to you

- If you are taking drugs which prevent your blood from clotting, such as Warfarin.
- If you have had a blood clot in the same limb before, a Bier's block may not be suitable.
- If you have an allergy to local anaesthetics.
- If it is difficult to find a vein in your arm.
- If you have been diagnosed with sickle cell disease or lymphoedema, or you require renal dialysis.
- If you have broken both your wrists.

If you are unhappy about the procedure for any reason, you should not continue until you have spoken to the doctor in charge of your care.

Going Home

Once the procedure has been completed and the position checked you may be able to go home. You are unlikely to experience any further adverse effects from the local anaesthetic.

You will have a plaster applied to the broken arm so it is advisable that you arrange for someone to take you home and stay with you to ensure you can manage with your arm in plaster with a sling.

At Home

Please make sure you can move your fingers freely without causing much pain. Should you experience any tightness of your arm, swelling or bluish discolouration please return to the emergency department as soon as possible.

Further Appointments

Before discharge we will book you in for our virtual fracture clinic, who will then call you within the next 72 hours and arrange an appointment to see an orthopaedic surgeon or physiotherapist.

Pain relief and medication

The nursing staff will advise you about painkillers before you leave the hospital. Please tell the nurses what painkilling tablets you have at home. You will be given an information sheet regarding pain relief (PIF 983 Pain Relief).

Feedback

Your feedback is important to us and helps us influence care in the future.

Following your discharge from hospital or attendance at your outpatient appointment you will receive a text asking if you would recommend our service to others. Please take the time to text back, you will not be charged for the text and can opt out at any point. Your co-operation is greatly appreciated.

Further Information

Contact the Emergency Department on

Tel: 0151 706 2050

Text phone number: 18001 0151 706 2050

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All Trust approved information is available on request in alternative formats, including other languages, easy read, large print, audio, Braille, moon and electronically.

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