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ਜੇ ਤੁਹਾਨੂੰ ਤਰਜਮੇ ਦੀ ਲੋੜ ਹੈ ਤਾਂ ਕਿਰਪਾ ਕਰਕੇ ਇਸ ਨੰਬਰ ਤੇ ਫੋਨ ਕਰੋ: 01932 723553

اگر آپ اس کا اردو زبان میں ترجمہ چاہتے ہیں، تو براہ کرم اس فون نمبر 01932 723553 پر رابطہ کریں

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Jeżeli chcemy, aby te informacje w innym języku, proszę zadzwonić 01932 723553

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Living with an Ilizarov frame

Trauma and Orthopaedics



Further Information

We endeavour to provide an excellent service at all times, but should you have any concerns please, in the first instance, raise these with the Matron, Senior Nurse or Manager on duty. If they cannot resolve your concern, please contact our Patient Advice and Liaison Service (PALS) on 01932 723553 or email pals@asph.nhs.uk. If you remain concerned, PALS can also advise upon how to make a formal complaint.

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WHAT IS AN 'ILIZAROV' FRAME?

The Ilizarov external frame is a combination of stainless steel rings, wires and threaded rods held together with nuts. It is used to treat fractures, correct deformities, lengthen bone and unite non-united fractures. Each Ilizarov frame is uniquely designed by the surgeon to the patient's individual requirement; adjusting the frame (if required) will also vary individually.

It is important for you to have a full understanding of how to look after your Ilizarov frame before leaving hospital.

Although your frame is unique the principles of care are the same.

Types of Ilizarov frames



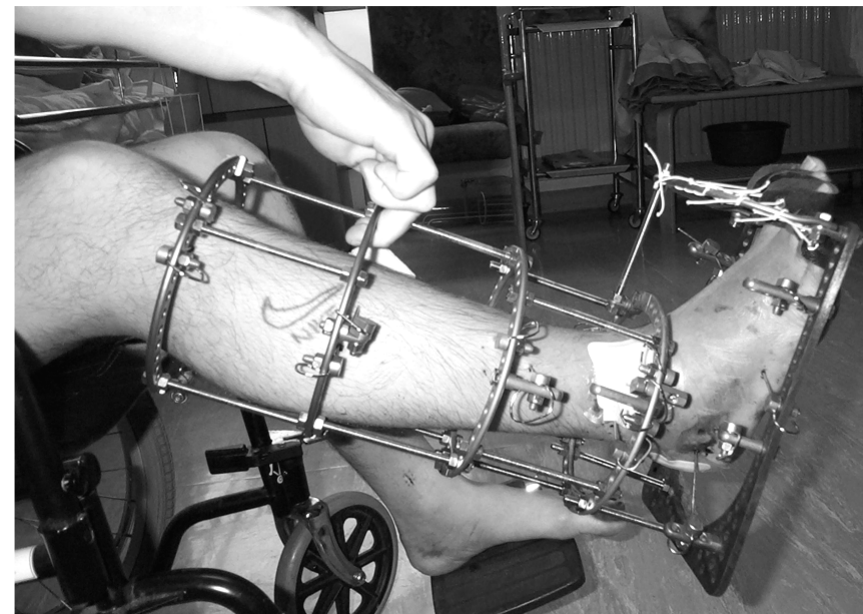


ADDITIONAL INFORMATION

For further advice Monday – Friday 09:00-16:00 Telephone: **01932 872000** ext **3646** to speak to Ann Fletcher, Rowley Bristow Unit Sister. Or via the hospital bleep system (**5204**) and ask for Hazel Watters, Orthopaedic Trauma Practitioner. Out of these hours **01932 872000** and ask for the Orthopaedic Registrar on call.

Ilizarov and external fixator wearer support group, can be found on www.ilizarov.org.uk/index1.htm

Additional information which you maybe given at your outpatient visit by the Surgeon in charge of your care



This is to be used if your frame requires adjusting the Surgeon in charge of your care will inform you if this is required.

[illegible]

WHAT YOU NEED TO DO –

1. Pin-site care:

You will be shown how to care for your pin sites during your stay in hospital prior to discharge.

Weekly routine pin site care is as follows:

- Wash your hands
- The dressings around the pin sites will be removed 48 hours following surgery, this will allow the pin sites to be checked and redressed.
- Weekly cleaning and showering starts 48 hours after surgery. At home this can be with a shower attachment or a jug of water over the bath. **DO NOT** put the frame in a bath of water as this could lead to infected pin sites. Use your own towel even at home.
- You can only shower your limb weekly, after showering dry off the excess water from your limb and the frame with a clean towel. It is not necessary to dry around each pin site.
- Shower gels or perfumed soaps can be used for general showering, but please **do not** use these products to clean your pin sites
- During the first few days after the application of an Ilizarov frame expect clear yellow or slightly bloody drainage from the pin-sites, therefore you may see a small amount of marking / staining on the dressing this is normal.
- Clean pin sites weekly after showering with a clean piece of gauze, soaked in Chlorhexidine antiseptic solution, each piece of gauze should only be used once and then thrown away. A bottle of Chlorhexidine antiseptic solution will be prescribed for you on the ward.

3. If you have been advised to weight bear on the leg with the Ilizarov frame it is important to do so as weight bearing helps the bone to heal more quickly – and thus reduce the time the Ilizarov frame can be removed

4. Further outpatient physiotherapy will be arranged as necessary

Your personalised exercise plan, which will be completed by the physiotherapist.

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Clothing

This can be a problem as leg frames can be bulky - a normal pair of trousers will not fit over them.

For arm Ilizarov frames – Large 'stretchy' T shirts can be very useful.

Skirts, pants, jeans, short can be adapted by splitting the seam on the affected side and attaching Velcro or press studs to the seam, this can make it a lot easier to dress.

Frame covers

Many patients' feel the cold through their frame during the winter months – having a frame cover can help to insulate your limb.

Use a piece of warm fabric for example fleece or quilted material which you can tie around the frame.

Your limb and Ilizarov frame should also be protected from the sunlight as the heat from the sun can be conducted through the wires of the frame.

Wearing frame covers will also help keep your frame and pin sites clean from 'everyday' dust and dirt.

Physiotherapy

1. To prevent muscle shortening, joint stiffness and muscle wasting developing, it is important to carry out daily exercises. Your physiotherapist will instruct you and when to do these. You will start these exercises whilst you are in hospital and a home exercise programme will be given to you prior to discharge.
2. **Try to use the limb with the Ilizarov frame on as normally as possible**

- All pin sites should be dressed with either a foam dressing, for example, Biotaine for moderate / heavy oozing or dry gauze dressing for clean dry pin sites and secured with a plastic clip.
- Biotaine and gauze dressings should be cut to size prior to placing them around the pin site. The nurse will show you how to do this on the ward prior to your discharge.
- Dressing should be held in place with a clip as this allows slight compression to the pin site, the benefits are:
 - It prevents the skin forming a tent shape around the pin site known as 'tenting'.
 - It reduces the movement at between the skin and pin site when mobilising.
- If crusts form (yellow in colour) they should be removed to allow exudate to drain and allow for observation of the wound around the pin-site. This should be done immediately after showering and cleaning.
- If you have scabs (scabs are usually dry and dark red or brown in colour) then we recommend that these should be left alone and allowed to fall off naturally.
- **DO NOT** apply any cream or other antiseptics to the pin sites
- This routine should help reduce pin site infections; however you may still get a simple pin site infection.
- Chlorhexidine antiseptic cleaning solution, Biotaine dressings and gauze dressing should be obtained from your GP. Gauze for cleaning can be bought from a chemist or obtained via your GP.

Signs of Pin site Infection

Observe for signs of infections around the pin sites, these include:

1. Pain – that is out of proportion of any pain you normally experience around the wire and reduces your mobility.
2. Redness around the pin sites, that is spreading (some patients find the pin sites are often red, others do not).
3. Swelling, Heat and Tenderness.
4. Visible drainage of pus, thick fluid, discharge of straw coloured fluid is not indicative of infection.
5. Feeling unwell –flu like symptoms.

If you have a pin site infection – it may be necessary to increase the frequency of pin site cleaning and dressing. You may have to clean the infected pin sites daily with the Chlorhexidine antiseptic cleaning solution and change dressings as required (this will depend on how much the pin site is oozing).

If you think your pin sites have become infected consult your GP, immediately, they will prescribe antibiotics if necessary. Some patients find they require several courses of antibiotics during their treatment.

2. Pain management:

Cleaning the pin sites and adjusting the frame should not be painful. Pain may be worse at night or when the skin or nerves are stretched.

To help you get the best possible pain relief, we recommend that you take your prescribed painkillers regularly.

Most patients will be prescribed regular pain killers when they go home. Your GP will be informed of your medicines but if you feel your

Living with your Ilizarov frame

Your frame will be in place for many months; remember that it is temporary.

All activities of daily living will take longer – therefore remember to be patient and allow time to avoid getting frustrated.

It is important to keep active – ensure you continue with social activities, it may even be possible for you to return to work or college– it is important not to become isolated and depressed. Keep your mind busy – reading books etc.

Maintain your normal life as much as possible and keep to your normal sleeping pattern.

If you feel very low in mood remember your frame is temporary and concentrate on the long terms benefits. If you continue to find living with your frame difficult you should seek help via your GP.

Diet

To promote bone and wound healing it is important that your diet is rich in protein, calcium and Vitamin C.

If you lose your appetite – milk and milky drinks will increase your nutritional intake. Try small meals with snacks –remember to include a variety of foods.

As you are less active you may gain weight, try and reduce cakes, sweets and crisps.

You may become constipated; this is not unusual when you are less mobile and taking regular pain killers, to prevent this you should increase your fibre and fluid intake.

WHEN TO CONTACT YOUR GP

- If you develop a pin site infection
- If your pain is not adequately controlled
- If you are feeling low and not coping with living with your frame

WHEN TO CONTACT THE HOSPITAL

- If you have not responded to oral antibiotics for a pin site infection
- If you experience a broken wire
- If you experience loss of tension in a wire or any loosening of pins

WHEN TO GO TO ACCIDENT AND EMERGENCY

- If you are feeling unwell and feverish

For additional information regarding your Ilizarov frame, log onto our website www.ashfordstpeters.nhs.uk, then simply click on to A-Z departments, and then limb reconstruction.

pain killers are not working speak to your GP or contact the Acute Pain Service at the hospital for advice.

You must not take any medicines classed as 'anti-inflammatory' drugs (such as Ibuprofen, Nurofen or Diclofenac.) as there is evidence that this can delay bone healing.

3. Smoking:

IF YOU SMOKE: IT IS IMPORTANT TO STOP NOW!

Smoking delays bone healing, up to approximately 30%, therefore smoking reduces the likelihood of your treatment being successful.

4. Mobilise:

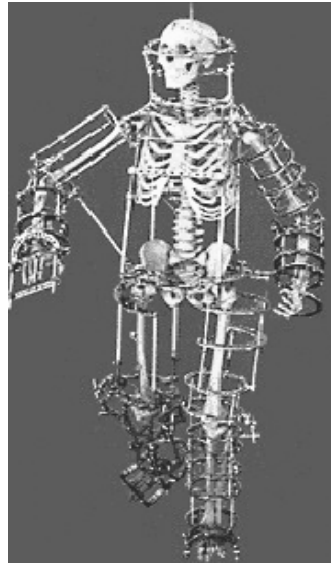
WEIGHT BEARING:

- You need to fully weight bear as this encourages the bone to knit
- Initially you will be taught to walk with aids (crutches or a frame) these will be provided.
- It is VITAL that the use of aids is discontinued as soon as possible so that all the weight is borne by the leg and the frame.

- The frame is removed once you can walk without aids and pain, as this suggests that the bone may have healed.

WALKING is important to your recovery and

- will help reduce the swelling in your leg
- will help stop your joints from becoming stiff
- reduces risk of you developing a blood clot
- helps to stop boredom
- it can be indoors or out doors
- one cannot overdo walking



- Amputation
- Systemic infection – This is extremely rare an infection that affects the whole body, not a local infection for example a pin site infection

Failure to treat pin site infection can lead to;

- The development of a deeper infection
- Loosening of the pin
- Loss of fixation or stability of the Ilizarov frame
- Osteomyelitis

Swelling – Postoperative swelling can last for 4 weeks or longer. If your limb becomes swollen after this time, it could be a sign that you have done too much. Ensure you rest and elevate your leg (preferably higher than your heart)

NB. Note – your limb may not return to the original size during treatment.

PROBLEMS

Infection

Can cause serious complications these include:

- Osteomyelitis – infection in the bone
- Delay in the fracture from healing – which can lead to having to wear the Ilizarov frame for longer an alternative treatment plan
- Non-union – the fracture not healing
- Loss of fracture alignment – the fracture not healing in the correct position

Broken wires / loose wire

If you experience a broken wire, rest at home and contact the Rowley Bristow Unit, during clinic hours. Monday – Friday 08:00-16:00 hours
Telephone: **01932 872000** Extension: **3646**

Loss of tension in wire and loosening of pins may cause pain, inflammation, redness, discharge and infection. Broken wires can be stabilised in clinic, however it may be necessary to replace the wires, this will require you to go back to theatre to have them exchanged.