

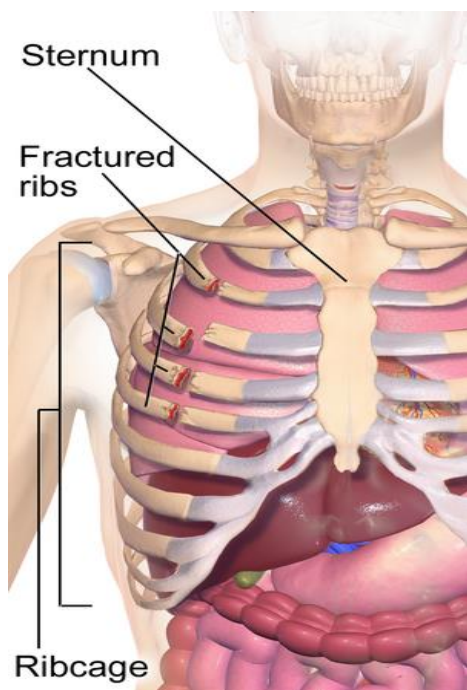
PATIENT INFORMATION

PHYSIOTHERAPY ADVICE AND EXERCISES FOLLOWING RIB FRACTURES



Introduction:

This leaflet will provide information about your rib fractures. Rib fractures can take approximately between 4 – 6 weeks to heal however; some discomfort may persist after this. It is important that you follow the advice below to reduce risk of complications, e.g. chest infection, and promote your recovery.



There are different types of rib fractures including:

- **Non-displaced** – this is where your rib is fractured and the pieces of bone stay in line with each other
- **Displaced/Complex** – this where the pieces of rib bone have moved and have become misaligned
- **Flail Chest** – this occurs when multiple adjacent ribs are broken in multiple places causing a segment of bone to become separate, free-floating and moving independently

You may have also experienced injuries such as:

- **Pneumothorax** – This is when air becomes trapped between the lining of the lung and the chest wall lining, causing a collapse of part or all of a lung. This can cause shortness of breath, chest pain or pain which is not in the area of the fracture. You may require a **chest drain** to help this air escape.
- **Haemothorax** – This is when there is blood in the space surrounding the lung. This can also cause shortness of breath and pain in the lower chest. You may require a **chest drain** to help this blood escape.
- **Abdominal Injuries** – The broken ribs may cause trauma to surrounding organs such as the liver or spleen. This may cause pain in the abdomen or the back. If this is the case, this will be managed separately.

Your time in Hospital:

During your time in hospital you may have the following medical management:

- **Chest Drain** – This is a tube that lies in your chest wall between the lining of your lungs and ribs to allow any blood/fluid and/or air to drain out. It helps your lungs to re-expand, therefore enabling you to breathe better. You will be advised on how best to mobilise with this.
- **Pain Relief** – Rib fractures are a painful injury and it is important to continue with pain relief **regularly**, to enable you to move and breathe normally. You will be discharged with suitable pain relief.
- **Oxygen Therapy** – When you fracture your ribs you might find breathing difficult, usually due to pain. Because of this you may not be fully expanding your lungs. This can mean that your body doesn't get enough oxygen. In this case, you may be put on supplementary oxygen.
- **Nebuliser** – If you are struggling to clear phlegm, you may be prescribed a saline (salt water) nebuliser to help loosen it. You will be taught to perform breathing exercises by your Physiotherapist. Do your Breathing exercises after having your nebuliser, as this will make it easier for you to clear your phlegm.

Physiotherapy Rib Fracture Treatment:

- There are no specific treatments for rib fractures.
- The most important thing is to avoid the development of complications whilst your ribs are healing. e.g. Chest Infection
- Pain is one of the main symptoms of rib fractures. This can stop you from wanting to cough or breathe normally/deeply, which can result in phlegm sitting on your chest, and small areas of your lung collapsing. This puts you at risk of developing a chest infection, therefore it is important that you are prescribed and taking pain medications regularly to enable you to clear your chest and breathe deeply enough.
- You will be advised on the following Breathing Exercises, and offered 'Incentive Spirometry' device or 'Bubble PEP' if appropriate. (See separate advice sheets)

Breathing Exercises: Active Cycle of Breathing Technique (ACBT):

- Follow the below cycle of ACBT as advised by your Physiotherapist.
- This is an effective way of helping to clear the phlegm off your chest as well as keeping your lungs inflated.
- The best position to perform your breathing exercises is in sitting; however, they can be done in any position.
- Time your exercises with your pain relief to decrease the discomfort and increase the effectiveness of performing them.
- These can be performed if you have a chest drain.
- You will be advised on how often to repeat the breathing exercises, but as a general rule they should be performed at least 4 times daily.
- You may be advised to repeat the cycle more regularly if are struggling to clear the phlegm off your chest
- You may find it helpful to hold a folded towel or pillow to your chest while doing these exercises to make them more comfortable to perform.

1. Relaxed Breathing:

Keeping your upper chest and shoulders relaxed; rest your hand on your tummy. Breathe in slowly and gently through your nose, feeling your tummy rise as you breathe in and fall as you breathe out. Continue until your breathing is calm and steady.

2. Deep Breathing:

Breathe in as deeply as you can through your nose. As you do, you should feel your ribs expand out to the sides. Hold your breath at the top for 2-3 seconds and then exhale slowly. Repeat at 4 times

3. Relaxed Breathing:

Repeat stage 1. To gain control over your breathing pattern

4. Huffing:

- **Low Huff** - This helps to move the secretions from the bottom of the lungs up a bit higher. Take a small breath in and then with an open mouth, breathe out steadily but forcefully, as if steaming up a mirror. It's important that you feel you have emptied your lungs at the end of the huff.
- **High Huff** – This helps to clear the secretions from the upper airway. Take a deep breath in and with your mouth open, take a short sharp breath out.

Both of these huffs can be repeated as needed, with relaxed breathing in-between to calm your breathing if needed.

5. Relaxed Breathing:

Repeat stage 1.

6. Supported Cough:

If you feel that you have got secretions, finish with a 'supported' cough:

Wrap a pillow or towel around the area of the ribs which are fractured, providing gentle pressure to the area. This will help decrease the amount of pain produced when coughing, and enable you to clear your chest more effectively. This can be used at any stage, when you need to cough.

Mobility:

- It is essential that you keep mobile whilst in hospital and at home.
- This can help you to open your lungs and breathe more deeply, which also helps to clear the phlegm off your chest.
- Keeping mobile can also reduce the risk of complications following your injury.
- You will also be encouraged to sit out of bed in the chair
- Little and often is best at first
- You may require assistance from the ward Physiotherapists or Nursing staff initially.

Do:

- **KEEP AS MOBILE AS POSSIBLE**
- **TAKE YOUR PAIN MEDICATION REGULARLY**
- **REPEAT YOUR BREATHING EXERCISES REGULARLY**

Don't:

- **STAY LYING DOWN FOR LONG PERIODS OF TIME**
- **STRAIN YOURSELF OR LIFT, PUSH OR PULL ANYTHING WHICH MAKES YOUR PAIN WORSE**
- **DO NOT SMOKE (CONTACT YOUR GP FOR SMOKING CESSATION ADVICE)**

Discharge Advice:

Once you get home:

- After you are discharged home, ensure that you continue to carry out the breathing exercises you were taught in hospital. Also continue with the supported cough- it is important to continue with these exercises to reduce the risk of developing a chest infection.
- Pain relief remains important and you should continue to regularly take the pain medication you are prescribed at home.

Returning to Normal Activity:

- After discharge from hospital take it steady for a few weeks to get used to your current limitations and what you are able to do pain-free.
- Limit heavy lifting and manual labour for at least 4 weeks after your injury, you should speak to your employer if this may be a problem at work.
- Do not return to contact sport for at least 6 weeks after your injury as this may affect the healing of your injury and therefore increase recovery time.

When to Seek Further Assistance:

It is advised that you speak to your GP or call 111 if any of the following symptoms are experienced once you're home:

- An increased amount or discoloured sputum (Phlegm)
- General unwell feeling or a fever/high temperature
- Gradually worsening shortness of breath

When to Call 999:

- **Sudden worsening of shortness of breath**
- **Severe new pain in your tummy or shoulder**
- **Increasing or severe chest pain**
- **Coughing up blood**

References/Resources:

'*Rib Fracture*' by Physiopedia. Available at: https://www.physio-pedia.com/Rib_Fracture (accessed 02/07/2021) - Figure 1.

'*Broken or Bruised Ribs*' by NHS. Available at: <https://www.nhs.uk/conditions/broken-or-bruised-ribs/> (accessed 08/07/2021)

'Rib Fractures' Best Practice, BMJ. Available at: <https://bestpractice.bmj.com/topics/en-gb/3000236> (accessed 28/03/2022)

Patient Services Department

It is important that you speak to the department you have been referred to if you have any questions (for example, about medication) before your investigation of procedure. If you are unhappy about the service you have received and would like to talk about it or make a formal complaint, please contact Patient Advice and Liaison Service on 0300 123 1732.

If you have a complaint and you want it to be investigated, you should write direct to the Chief Executive at Worcestershire Acute Hospitals NHS Trust, Charles Hastings Way, Worcester WR5 1DD or contact the Patient Services Department for advice.

If you would like this information in other formats or languages please call 01905 760453 or email: communications@worcsacute.nhs.uk

www.worcsacute.nhs.net

Physiotherapy Department, Level 2 Worcester Royal Hospital.

If your symptoms or condition worsens, or if you are concerned about anything, please call your GP, 111, or 999.

Patient Experience

We know that being admitted to hospital can be a difficult and unsettling time for you and your loved ones. If you have any questions or concerns, please do speak with a member of staff on the ward or in the relevant department who will do their best to answer your questions and reassure you.

Feedback

Feedback is really important and useful to us – it can tell us where we are working well and where improvements can be made. There are lots of ways you can share your experience with us including completing our Friends and Family Test – cards are available and can be posted on all wards, departments and clinics at our hospitals. We value your comments and feedback and thank you for taking the time to share this with us.

Patient Advice and Liaison Service (PALS)

If you have any concerns or questions about your care, we advise you to talk with the nurse in charge or the department manager in the first instance as they are best placed to answer any questions or resolve concerns quickly. If the relevant member of staff is unable to help resolve your concern, you can contact the PALS Team. We offer informal help, advice or support about any aspect of hospital services & experiences.

Our PALS team will liaise with the various departments in our hospitals on your behalf, if you feel unable to do so, to resolve your problems and where appropriate refer to outside help.

If you are still unhappy you can contact the Complaints Department, who can investigate your concerns. You can make a complaint orally, electronically or in writing and we can advise and guide you through the complaints procedure.

How to contact PALS:

Telephone Patient Services: 0300 123 1732 or via email at: wah-tr.PALS@nhs.net

Opening times:

The PALS telephone lines are open Monday to Thursday from 8.30am to 4.30pm and Friday: 8.30am to 4.00pm. Please be aware that a voicemail service is in use at busy times, but messages will be returned as quickly as possible.

If you are unable to understand this leaflet, please communicate with a member of staff.