



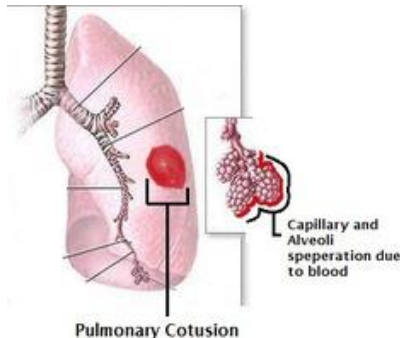
Patient information and discharge advice for patients who have suffered pulmonary contusions



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What is a pulmonary contusion?



A pulmonary contusion is bruising or bleeding of your lung tissue that may cause pain and trouble breathing. It is a common injury after a blunt trauma to the chest.

The force of the trauma may cause bleeding and swelling inside one or both of your lungs.

Causes

Pulmonary contusions usually happen when there is a chest injury, such as from:

- Car crashes.
- Severe falls, especially from a high height.
- Sports injuries.
- Industrial injuries.
- Crush injuries

What are the signs and symptoms of a pulmonary contusion?

You may have one or more of the following:

- Chest pain
- Trouble breathing

- Coughing up blood or large amounts of watery sputum (spit)
- Fast and shallow breathing
- High-pitched wheezing when you breathe out

How is a pulmonary contusion diagnosed?

Your Major Trauma Team will take a history of how you sustained your injuries and exam you.

This is an important part of the diagnosis of your injuries, as it will lead the team to suspect internal injuries and use the following investigation's to diagnose the injuries:

- **Chest x-ray:** It may take up to 6 hours after your injury before a pulmonary contusion can be seen on an x-ray.
- **Ultrasound:** This machine uses sound waves to show pictures of your organs and tissues on a monitor. An ultrasound may be done to show if you have fluid, swelling, or bruises in your lungs.
- **CT scan:** It is now common practice for patients to undergo a CT (CAT) scan of the chest. This is a 3 dimensional x-ray.

How is a pulmonary contusion treated?

There is no direct treatment of contusions and that treatment is aimed at preventing complications.

Your treatment will depend on how severe your injury is. The team will use different treatments to help you breathe easier and get enough oxygen into your body. You may need more than one of the following:

- **Pain medicines:** These are used to decrease your pain and make it easier for you to breathe. (During your treatment in the Major Trauma Centre you will be seen by the specialist pain team)
- **Breathe deeply and cough:** This helps to open the air passages and bring up sputum from your lungs. You can breathe deeply and cough on your own, or with the help of an incentive spirometer. An incentive spirometer is a device that can help you take deeper breaths.
- **Oxygen:** You may need extra oxygen if you have difficulty breathing. You breathe the oxygen through a face mask or a nasal cannula. A nasal cannula is a pair of short, thin tubes that rest just inside your nose.

What are the risks of a pulmonary contusion?

- In the most severe cases pulmonary contusions can be life threatening. They can affect your breathing to the extent that your oxygen levels become dangerously low.
- In some cases the lung damage may be so severe that admission to the Critical Care Unit is required. Some patients need to go onto a ventilator (breathing machine) as a result of pulmonary contusions.
- Less severe complications include side effects from the oxygen therapy such as skin damage from the masks, air swallowing and a dry mouth.

- Pulmonary contusions can increase the risk of pneumonia (lung infections) which may require a course of antibiotics to treat,

Discharge

A discharge summary, medical advice, patient information leaflet, medical alert card, sick note, and medicines will be given to you on the day of discharge from the hospital.

The first 24 hours after discharge

You should be accompanied by a responsible adult on returning home from the hospital that can stay with you for at least 24 hours.

Breathing Exercises

Whilst in hospital you would have been shown how to use an incentive spirometer - This is a breathing exercise device. Along with coughing and walking, it helps to prevent collapse of the lungs and pneumonia.

Your Major Trauma Therapy Team will ensure you are discharged with an incentive spirometer as well as breathing exercises for you to do after discharge.

Discomfort

You may experience pain and discomfort in the chest.

Painkillers will be prescribed for you for 7 – 14 days. The Trauma Acute Pain Team will discuss you painkillers with you prior to discharge and also make recommendations to yourself and your GP.

The painkillers may well cause constipation, so it's important to get plenty of fibre in your diet while you are recovering. You may also need to take laxative drugs while taking the painkillers.

Tiredness

Your body is using a lot of energy to heal itself, so you will feel more tired than normal – sometimes it can come upon you suddenly.

Keep a routine, get up at your normal time in the morning, get dressed, and move about the house. If you get tired, you can rest later.

Feeling emotional

If you feel upset or emotional in the days and weeks after your injury, don't worry as this is a perfectly normal reaction which many people experience.

Family and friends

Family and friends can give you practical help with the tasks you might be temporarily unable to do while you recover – such as driving, the weekly shop, or lifting heavier items. They will keep your spirits up.

If you live alone, and you do not have family or friends close by, organise support in advance - have family or friends come to stay with you for the first few days after discharge if possible.

Build up gradually

Have a go at doing some of the things you'd normally do, but build up gradually. Everyone recovers at a different speed, so not all of the suggestions will be suitable for everybody.

Returning to work

Getting back to your normal work routine sooner rather than later can actually help you to recover more quickly. So work can be part of your recovery.

How quickly you return to work depends on a number of things. People whose work involves a lot of heavy lifting, or standing up or walking for long periods of time, will not be able to return to work as quickly as those

who have office jobs which are less demanding physically.

If your employer has an occupational health nurse or doctor they will advise you on this. Alternatively your GP can give you advice.

Ultimately, it's your decision when you want to go back, and there's no insurance risk to your employer if you choose to do so.

You do not need your GP's permission to go back to work - this is ultimately your decision.

Depending on the nature of your job, you might want to ask your employer about returning to work on lighter duties at first. This means:

- Spending more time sitting rather than standing or walking
- Doing work that is mostly paperwork, using a computer or telephone
- Not carrying more than around 5 kg any significant distance
- Avoiding tasks such as prolonged loading or unloading, packing or unpacking.

If you have an HR Department at work, they will be able to advise you on how your absence might affect any benefits you may be receiving during your time off.

Driving

You should inform your insurance company about your operation. Some companies will not insure drivers for a number of weeks after injury, so it's important to check what your policy says.

Before resuming driving, you should be free from the sedative effects of any painkillers you may be taking.

You should be comfortable in the driving position and able to safely control your car, including freely performing an emergency stop.

When should you return to hospital?

You should bear in mind that there always is a risk of developing complications after every chest injury.

Call your doctor or attend the Emergency Department, if you have:

- Increased or persistent pain not relieved with pain relief medications
- Increased pain in the chest
- Persistent fever
- Temperature above 38.5°C
- Shakes, swelling, chills, rigors
- Uncontrolled vomiting
- Inability to have a bowel movement after four days
- Dizziness/feelings of faintness
- Blood in your vomit, urine, or cough
- Swollen leg or legs

Follow up appointments

It is important that you do not miss any of your follow up appointments.

Your Major Trauma Team will inform you prior to discharge if you will require a follow up in our Major Trauma or Emergency General Surgery Clinic.

Who do I contact if I have questions or concerns?

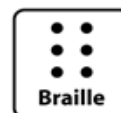
- Major Trauma Nurse Coordinators: Contact Hospital switch board on 0151 525 5980 and ask switchboard to bleep 5428. This service is available 7 days a week from the hours of 8 am to 8 pm.

There is also a 24 hour answer machine 0151 529 6255 leave your name contact number and a brief message.

- Nursing staff on Major Trauma Ward: Telephone number: 0151 529 6255
- During working hours 8am - 5pm Monday to Friday you can Contact the secretary and leave a message for the surgical team.
- If you think that your condition is serious then it is best to come straight to Aintree Emergency department*.

Please seek advice from your GP.

*When you come to the hospital please bring this and any other relevant discharge documents that you may have been given at the time of discharge to help the A&E doctors decide your management.



If you require a special edition of this leaflet

This leaflet is available in large print, Braille, on audio tape or disk and in other languages on request. Please contact:

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Email: interpretationandtranslation@aintree.nhs.uk