NHS
Worcestershire
Acute Hospitals
NHS Trust

Investigation For Pulmonary Embolus

The emergency department doctor who has examined you today feels that you may have a pulmonary embolus (PE), however further tests will be necessary (CTPA scan) to confirm this diagnosis. A CTPA is a type of CT scan looking at the lung arteries and will involve the injection of contrast solution into a vein. In the meantime the doctor feels that it is safer that you start treatment. The Treatment may either be in tablet form (taken twice a day - Rivaroxaban) or as a once daily injection (Clexane®) under the skin until we are sure exactly whether or not you have had a pulmonary embolus. The treatments work by preventing your blood from clotting as quickly or as effectively as normal. The doctor will discuss with you whether you are suitable to have either the Rivaroxaban tablet or the injection and will provide information for you to help you make up your mind if you have the option of taking either.

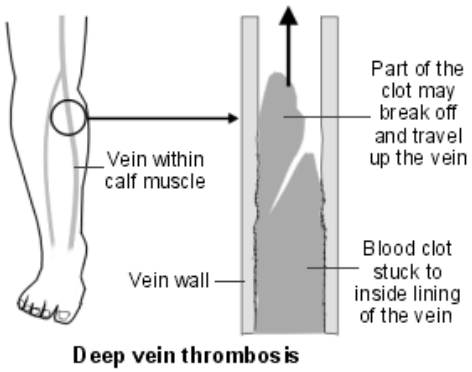
If you experience any unusual bleeding, speak with your doctor straightaway or go to your local Emergency Department.

The doctor wishes you to return to the CDU (in the emergency department) on

Date	**Day**	**Time**

What is a pulmonary embolism?

An embolus is a 'wandering' blood clot that moves through your blood stream. All the blood in your body has to be pumped through your lungs to pick up oxygen from the air. If a blood clot develops in the deep veins of your leg or pelvis (DVT or deep vein thrombosis) some or all of it may break off, go through your heart, and then block off part of your pulmonary (lung) circulation.



Deep vein thrombosis

Most people with a PE are treated successfully, however there are some possible serious complications:

Small clots may cause no symptoms at all, but some small clots can break off a clot in your leg or pelvis over several days. This causes increasingly troublesome symptoms. Your lungs can start to bleed temporarily, which causes sharp pains when you breathe. You can also cough up blood.

Medium clots can cause sudden breathlessness. Sometimes, if a **large clot** is big enough to block lung circulation, it can cause collapse or even sudden death.

Who gets it?
About 1 in 1,000 people have a DVT each year in the UK. Any condition that makes your blood sticky or slows down circulation in the veins of your legs may lead to pulmonary embolism. Common causes are:

- Orthopaedic operations - on the legs (e.g. hip or knee replacement)
- Other major surgery (especially in the pelvis)
- Leg fracture - with the leg being put in plaster
- Immobility - as can happen on bed-rest in hospital, or if you don't move around on a long-distance car or air journey
- Pregnancy – before, during and after delivery
- Previous DVT or pulmonary embolism
- Advanced cancer

However, in about half of cases there is no obvious cause – doctors call these idiopathic. Some people are born with a tendency to clot easily, but this makes little difference to treatment and testing for this possibility is usually not very useful.

What is the outlook (prognosis) for a Pulmonary Embolism?

This depends on the type of PE and on whether there are any other medical problems.
If a PE is treated promptly, the outlook is good, and most people can make a full recovery.
A PE is a serious condition and can be fatal. Without treatment, about 3 in 10 people would die from a PE. With treatment, the outlook is much better and about 5 in 100 people die from a PE. There is however a high risk of another PE occurring within 6 weeks of the first one. This is why treatment is needed immediately and continued for about three months.

Deciding whether you have a Pulmonary Embolus or not

Once the CTPA has been performed we will then know whether you have had a PE or not. If the scan shows a PE then if you have been started on rivaroxaban tablets these will be continued and you will be referred to other specialists for follow-up. If you have been started on injections then these will be continued and you will be referred to the anticoagulation clinic so that warfarin tablets can be started, and when the levels in your blood are high enough the injections will be stopped. Warfarin tablets require regular blood tests to ensure that the correct treatment levels are maintained.
If the CTPA scan is negative (ie no PE) then the diagnosis of pulmonary embolus is unlikely and the rivaroxiban tablets / injections will be stopped and you will be asked to go to see your GP for consideration of further tests / treatments for your symptoms.

General Advice

Pain relief: Paracetamol is safe, aspirin and non-steroidal anti-inflammatory drugs e.g. ibuprofen, should be avoided. These may interfere with your treatment.
Exercise and rest: You may find that your physical activity is limited due to your symptoms. It is advisable to avoid prolonged periods of exercise, and ensure you take adequate rest.

Acknowledgements – British Thoracic Society, Source: Patient.co.uk

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 Friday from 8.30am to 4.00pm. Please be aware that you may need to leave a voicemail message, but we aim to return your call within one working day.

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

For additional medical advice, if your symptoms or condition worsens:

Contact your GP

NHS 111:	Telephone 111
Get help with your symptoms, NHS111:	https://111.nhs.uk/
Information to help you manage your health:	www.nhs.uk

In an emergency telephone 999

Emergency Department (A&E)
Alexandra Hospital
Woodrow Drive
Redditch B98 7UB

Tel: 01527 512030

Minor Injury Unit
Kidderminster Hospital
Bewdley Road
Kidderminster DY11 6RJ

Tel: 01562 513039

Emergency Department (A&E)
Worcestershire Royal Hospital
Charles Hastings Way
Worcester WR5 1DD

Tel: 01905 760743