

## Patient information

# Pulmonary embolus – a guide for patients

You are currently being investigated as to whether you may have a Pulmonary Embolism.

### **Q What is a pulmonary embolus (PE)?**

**A** A PE is a blood clot or blood clots which have travelled to the lungs, usually from a deep vein thrombosis (DVT) of one of the deep veins of the leg. The original DVT may have caused pain, redness and swelling of the leg or may not have caused any obvious sign in the legs.

### **Q What are the symptoms of PE?**

**A:** Patients with PE may develop unusual (and often sudden onset) shortness of breath or chest pain on breathing deeply, or may cough up small amounts of blood. Some people may also feel dizzy and unwell, or actually collapse when a PE first takes place.

### **Q How is a PE diagnosed?**

**A:** If your GP suspects you may have had a PE, you will be referred to the Ambulatory Assessment Unit (AAU) or Emergency Department (ED) for a clinical assessment. This will include an interview with a doctor, examination, blood tests, an electrocardiogram (ECG, recording of your heart trace) and a chest X ray. If other reasons for your symptoms are identified, you will be treated for these as appropriate.

In some cases we can exclude a PE using a blood test called a D-dimer combined with a clinical assessment by the doctor. If your D-dimer test is abnormal or you have other

features suggestive of a PE then you will require a scan of your lungs. This is usually a 'Computed Tomography Pulmonary Angiogram (CTPA)'. This is a CT scan of the lungs in which an injection of contrast (dye) is given via a vein in your arm, to show up the blood vessels in your lungs more clearly. The doctors will insert a needle (cannula/IV) in your arm, immediately prior to the scan, to allow the contrast to be given in the CT scan department. The results of the scan will usually be available within hours of the test. In certain circumstances, we may arrange for a different scan of the lungs called a 'perfusion (Q) scan'.

**If you are being assessed in the evening or at night, and your clinical condition is stable, the doctors will likely arrange for you to have a dose of a blood thinner/anticoagulant, and allow you to return the following day to AEC for assessment.**

A PE can only be diagnosed with a scan of the lungs and cannot be diagnosed on the blood test or chest X-ray alone. If your scan is negative for PE then it may be that your symptoms have been caused by a chest infection, inflammation of the chest wall (pleurisy) or inflammation of the chest cartilage (costochondritis). The doctor will give you appropriate treatment and advice if this is the case.

### **Q Will I need to stay in hospital if PE is diagnosed?**

**A:** Some patients with confirmed PE are admitted to hospital for the first few days of treatment, however, many patients can be safely treated as an outpatient. Let your doctor know if you have any concerns about this.

### **Q How is PE and / or DVT treated?**

**A:** The medications used to treat a DVT / PE are referred to as anticoagulants or blood thinners. In the majority of patients, we now start a drug called a Direct Oral Anticoagulant (DOAC). This does not usually require blood test monitoring in the way that warfarin, the blood thinner most commonly used previously, does. The duration of treatment can vary and therefore all patients should be followed by at three months in a clinic. **If you do not receive a follow up appointment with the chest (respiratory) team or (where relevant) your oncologist, please contact one of the respiratory secretaries. It is very important to keep taking your treatment *and not miss any doses* until this review.** Sometimes we will use alternative forms of blood thinning such as Tinzaparin injections or Warfarin. The doctor and pharmacist will discuss the treatment in more detail with you.

### **Q Can I take my regular medications?**

**A:** You will be advised by the pharmacist about what medications you can and cannot take (asking particularly about aspirin and other medicines that thin the blood).

### **Q Can I give my own Tinzaparin injections?**

**A** If you require Tinzaparin injections then AEC can teach you how to self-inject if this is more convenient.

### **Q What causes a PE or DVT (collectively known as a venous thromboembolism, VTE)?**

**A** A blood clot can form after a period of reduced mobility, eg after having a major surgical operation or a major illness. VTE has been well publicised in relation to long haul flights and travel. VTE can also occur in pregnant women, those on Hormone Replacement Therapy (HRT) or taking the contraceptive pill, although this is less common. Occasionally, VTE can be caused by a more serious illness or it may be hereditary, with some clotting disorders running in families. If VTE is confirmed, and it is not clear why, your doctor will discuss with you whether you need any further tests to discover the underlying cause. In many cases the underlying cause remains unexplained even after carrying out the tests. If no underlying cause is discovered, it may be safest to remain on treatment long term. This will be decided when you are assessed in the follow up clinic.

### **Q Do I have to rest whilst being treated for a PE / DVT?**

**A** In the initial weeks after being diagnosed with VTE, it is important to keep moving. This should be a gradual build-up of gentle exercise over the next few months, aiming to reach 'usual activities'. You should listen to your body and rest when you feel very breathless or if you feel unwell. Standing for long periods is not advised and, when you sit down, it is helpful to put your feet up.

### **Q How can I avoid any long term complications?**

**A** If you are on the pill, or taking any form of hormone treatment, your doctor will discuss whether it is possible to switch to an alternative. If you have had a previous

VTE, your doctor will discuss whether you should take your treatment for longer than three to six months, even 'lifelong'.

If you have had a DVT as well as a PE, grade two compression stockings, which can be prescribed by your GP, can help ongoing leg symptoms. You need to be measured for these to ensure a good fit.

## **Q What should I do if I experience any worsening of my symptoms?**

**A** If you experience any worsening of your symptoms after discharge home following diagnosis of a pulmonary embolus, such as increased breathlessness, prolonged dizziness or chest pain, please seek urgent medical advice.

*If you would like any information regarding access to the West Suffolk Hospital and its facilities please visit the website for AccessAble (the new name for DisabledGo)*

<https://www.accessable.co.uk/organisations/west-suffolk-nhs-foundation-trust>



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