Pulmonary embolism

What is it?

A pulmonary embolism occurs when something from another part of the body (embolus) blocks a blood vessel in your lungs.

What causes it?

The most common cause is a blood clot. This can form in the vein of your legs, thigh or pelvis. It may be due to:-

- an injury,
- surgery,
- blood vessel diseases,
- an inherited tendency,
- remaining immobile for a long time, e.g. long plane/car journeys.

The blood clot travels in your circulation (the movement of the blood around the body) to the lungs where the arteries are narrower than the veins in the legs. Small blood clots may not cause problems but larger ones can become stuck.

Sometimes the cause of a pulmonary embolism is unclear.

Who is at risk?

It is most common in people on prolonged bedrest. This may be necessary after surgery or because of illness. People with inactive lifestyles can also be at risk because of the lack of movement of blood in the legs. Dehydration increases the risk.

What are the symptoms?

The most common symptom is a single swollen, painful leg. Others are:-

- wheezing,
- laboured or difficult breathing (dyspnoea),
- chest pain,
- spitting up blood (haemoptysis),
- dizziness or blackouts.

How is it diagnosed?

We may carry out the following tests:-

- an ECG (testing the rhythm of the heart beat),
- a blood test,
- a chest X-ray,
- lung scans.

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How is it treated?

We may give you:-

- oxygen to help your breathing,
- pain killers to relieve the discomfort,
- medicines to maintain your heart functions,
- anticoagulant therapy, usually heparin (a substance which prevents blood from clotting). This is given via a needle in a vein or under the skin.

How is it prevented?

The most common cause of a pulmonary embolism is blood clots caused by deep vein leg thrombosis. Therefore, early detection and treatment of the blood clots is the best way to prevent a pulmonary embolism occurring.

Once you have had a pulmonary embolism you will most likely need to take a medicine called warfarin after you leave hospital. This is an anticoagulant which reduces the ability of the blood to clot to some extent.

We will give you a card with details of the dosage. It is important that you always carry this card, so that people know you are taking warfarin.

You will need to see your GP regularly as it is important to keep good control of the level of warfarin. Your GP will take blood tests to check how long it takes your blood to clot. Depending on the results, your GP may increase or decrease your dose to get the level right.

Points to remember

- Never stop taking your tablets without medical advice.
- Always inform your dentist or doctor that you are taking warfarin before medical treatment.

You can find more information about pulmonary embolism on the British Lung Foundation's website: www.lunguk.org

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(Written by a consultant geriatrician and checked by volunteer readers).

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