

DEEP VEIN THROMBOSIS (DVT)

What is it?

Thrombosis occurs when the blood changes from a liquid to a solid state thereby producing a clot. If the blood clot occurs within a major vein, the condition is known as deep vein thrombosis (DVT).

The most common veins affected by DVT are those of the legs or within the pelvis (lower abdomen).

Why is it dangerous?

First of all, DVT is not always dangerous - it is perfectly possible to have a small DVT without even being aware of it.

The condition only becomes dangerous, or even fatal, if the blood clot becomes big enough to cause obstruction within the most important of the body's large veins - particularly those that take blood from the heart to the lungs.

The deep veins of the legs and pelvis are large, so clots forming within these veins can be of a considerable size, making them potentially hazardous, particularly if they should move within the body.

What happens in a danger situation?

A blood clot will form in the veins of an individual's thigh or calf muscles during long periods of inactivity. When the person suddenly stands up it increases blood flow within the vein, and the clot (or part of it) can break off and head up towards the heart, from which it can be pumped into the lungs, becoming a pulmonary embolism. This may obstruct the flow of blood through the lungs so much that death follows very quickly.

Why is DVT at greater risk of occurring on long-haul flights?

For two main reasons; firstly it is very dry in planes and there is a likelihood of passengers becoming dehydrated. With dehydration the blood becomes thicker than usual and therefore more prone to clotting.

Alcoholic drinks are readily available on planes, but they make you go to the toilet more. Unless you drink enough non-alcoholic drinks to compensate, this will increase the tendency to dehydration.

Secondly, because there are limited opportunities to move around on planes, circulation becomes sluggish. Cramped seating may cause pressure points on the legs that slow blood flow locally, and this can increase the tendency for a clot to form.

There appear to be other factors involved, which are not yet fully understood, because DVT has also been observed among Business Class and First Class passengers, who have more leg room. DVT is also observed in other types of long journeys, not just with air travel.

What are the risks of it happening to me?

Factors that may contribute to a higher chance of DVT are:

- being a smoker
- being over 40
- taking the contraceptive pill
- being overweight
- having had the condition before
- having recently undergone major surgery

There are also some medical and inherited conditions that are associated with an increased tendency of the blood to clot, but these are rare.

What are the symptoms?

Swollen ankles, particularly if one ankle is far more swollen than the other. However, swollen ankles are very common on long flights because of the lack of 'muscle pumping' that helps drain away tissue fluid normally. This is not due to DVT.

Localised pain or tenderness within a calf or thigh muscle is a possible symptom of DVT, and more serious symptoms are the onset of a cough, increased heart rate, breathlessness, chest pain or palpitations.

How can I avoid it happening?

- Drink plenty of water and/or fruit juice.
- Avoid alcohol, which will dehydrate you more.
- Get up and move around as often as you can.
- When you are sitting, try moving your ankles around and going up and down on your tiptoes (a bit like mini leg-raises).
- Wear elastic compression stockings to improve circulation.
- Avoid sitting with your legs crossed and do not wear socks or tights that are too restrictive.
- Some doctors also recommend you take an aspirin before you fly, but you should only do so if your GP advises.

Can aspirin help?

Aspirin makes the blood less 'sticky' and reduces its tendency to clot. But such benefits may be outweighed by its potential to irritate the stomach lining or an existing stomach ulcer. It is not yet proven whether aspirin, or any other blood-thinning drug, will reduce the occurrence of DVT.