



Hello, and welcome again to Study English, IELTS Preparation. I'm Margot Politis.

If you've been on a flight recently, you will have heard about the danger of sitting still for a long time in an aeroplane, apart from the danger of boredom that is!

The danger is from a condition called 'deep vein thrombosis', or 'DVT'.

Today on Study English we'll listen to a doctor talk about DVT, then we're going to look at how to talk about things that might happen in the future.



Deep vein thrombosis is where a clot forms in the calf veins and occasionally in the veins of the leg, sometimes in the veins of the pelvis, and this is a great concern because the clot may dislodge, travelling with the flow of blood into the right side of the heart and from there into the lung.

When we're travelling on long haul flights, several things happen. First of all, we're stationary. We're not moving our legs, so there's no physiological compression of the calf muscles. Blood tends to sit in the veins and may clot.

Number two, the environment is dry. We dehydrate, we may drink some alcohol. We dehydrate even further. Alcohol's a diuretic agent, and it results in us actually drying out, and that makes the blood a little bit thicker and stickier, and these factors lead to clotting.

Sometimes, in perhaps particularly the economy section of an aeroplane, we may be a little bit cramped and our leg may be slightly compressed on the seat. This could further prevent blood flow back to the heart and trap blood in the leg, where clotting may occur.

Dr Crantock was talking about things that that 'could' happen, 'may' happen, or 'perhaps' will happen in the future.

'Perhaps' is an *adverb*. It is a word like maybe or possibly. It gives a statement the sense that the speaker is not sure if the thing will happen.

'Perhaps I will' means the same as 'possibly I will', or 'maybe I will'.

'May' and 'could' are *modal verbs*.

'May' has a number of meanings. The most common use is when you are asking 'permission'.





'May I come in? Yes you may.'

But the other use of 'may' is to talk about possibilities in the future.

'I may come in tomorrow' means in the future, I will possibly come in, but it's not definite.

'Could' has a number of meanings too.

The first is 'ability'.

'When I was little I could swim' means when I was young, I was able to swim.

But 'could' is also used to express future possibilities.

'It could rain tomorrow'. It's not definite, but it might rain.

Dr Crantok is talking about what can happen sometimes on flights, but it won't definitely happen. Listen again.

Sometimes, in perhaps particularly the economy section of the aeroplane, we may be a little bit cramped and our leg may be slightly compressed on the seat. This could further prevent blood flow back to the heart and trap blood in the leg, where clotting could occur.

So for speculating, or thinking about what will happen in the future, we can use *adverbials* like 'possibly' or 'perhaps';

we can use *modal verbs* like 'may' and 'could';

and we can use *phrases* like 'I guess', 'I imagine', 'I suspect'.

So in the clip he says 'blood clotting could occur'.

We can also say:

'Blood clotting may occur.'

'Blood clotting will perhaps occur.'

'Blood clotting will possibly occur.'

'I suspect blood clotting will occur.'

Notice that the *adverbials* can occur in a number of places in the sentence.

'Blood clotting will perhaps occur.'

'Perhaps blood clotting will occur.'



'Blood clotting perhaps will occur.'

'Blood clotting will occur perhaps.'

Listen to Dr Crantock and the way he structures his argument. Listen for a *topic sentence*, and for the way he lists the different ideas.

When we're travelling on long haul flights, several things happen. First of all, we're stationary. We're not moving our legs, so there's no physiological compression of the calf muscles. Blood tends to sit in the veins and may clot.

Number two, the environment is dry. We dehydrate, we may drink some alcohol. We dehydrate even further. Alcohol's a diuretic agent, and it results in us actually drying out, and that makes the blood a little bit thicker and stickier, and these factors lead to clotting.

The first sentence is the *topic sentence*. He said 'When we're travelling on long haul flights, several things happen'.

So we know from this topic sentence, that he is going to tell us about traveling on long haul flights.

But there are lots of things you can say about travelling on long haul flights. So he says something else in this sentence that gives us more information. He says 'several things happen'.

This phrase is called the *controlling idea*. Every topic sentence has a controlling idea. It tells us what the focus of the paragraph will be.

So he's going to be discussing several things that happen on long haul flights.

In the rest of the paragraph, he lists some of the things that happen. He raises the points one by one, and discusses them in detail.



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Number two, the environment is dry. We dehydrate, we may drink some alcohol. We dehydrate even further. Alcohol's a diuretic agent, and it results in us actually drying out, and that makes the blood a little bit thicker and stickier, and these factors lead to clotting.

Dr Crantock says 'first of all, we're stationary'.

This is the first factor in his argument. People are stationary, or sitting still.



He says 'Number two, the environment is dry'. This indicates it is the second factor in his argument.

Moving on through the argument, you can keep discussing factors by using transition signals such as:

'another factor is';

'in addition' or 'additionally';

'furthermore';

'above all'.

You could also use 'next', but this is quite informal as well.

The last reason or item in the list could be introduced by 'lastly' or 'finally'.

It good practice to watch out for these transition devices when listening to someone talk. They'll help you follow an argument more clearly.

Finally for today, let's look at some *definitions*. Doctor Crantock gives a definition of the condition he is talking about, because it's an unusual medical term.

Deep vein thrombosis is where a clot forms in the calf veins and occasionally in the veins of the leg, sometimes in the veins of the pelvis.

He says: 'Deep vein thrombosis is where a clot forms in the calf veins'.

This is common pattern for giving a definition.

First, *name* the thing being defined. In this case, it's:

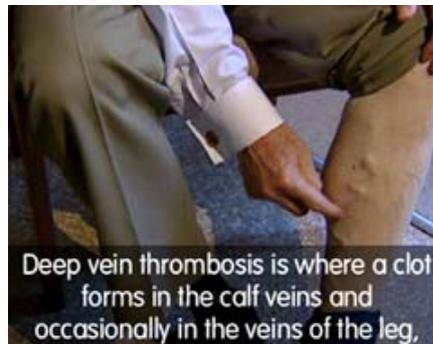
'Deep vein thrombosis ...'.

Secondly, use the verb *to be* – 'is' or 'are'.

Here, we'd say:

'Deep vein thrombosis is ...'

Thirdly, we can write the *class*. What kind of thing is it? In this case, DVT is 'a medical condition'.





So we might have:

'Deep vein thrombosis is a condition ...'.

Next we use a word like *which*, *who*, *where*, or *that*.

'Deep vein thrombosis is a condition where ...'

And finally we give the *characteristics* of the thing. This could be a physical description, or a description of behavior. In the case of a medical condition, this would most commonly be the symptoms or effects of the condition.

'Deep vein thrombosis is a condition where blood clots form in veins.'

Let's try a couple of examples.

What is a 'computer'? It 'stores and processes information'.

'A computer', 'is', 'a machine', 'that', 'stores and processes information'.

What is an 'accountant'? Well we have the phrase 'analyse and deal with finances'.

'An accountant' 'is' 'a person' 'who' 'analyses and deals with finances'.

And what is the time? The time is something that we have run out of for today.

See you next time on Study English. Bye bye.