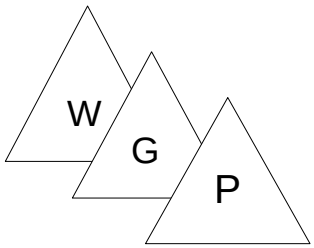

Westbury Group Practice

Advice on travel-related DVT

Introduction

A possible link between deep vein thrombosis (DVT) and long-haul air travel was first suggested by reports in medical journals in the 1950s. There early reports generally pointed to immobility is the common underlying risk-factor. Despite this the information is as yet unclear on

- how common DVT is
- what the risk factors are
- how it may be prevented

What is known, however, is that DVT may be associated with any form of long distance travel whether by air, car, coach or train. In particular long-haul air travel (flights lasting longer than five hours) where passengers remain immobile in the seated position for long periods of time, may be associated with an increased risk. This advice summarises what is known about

- travel-related DVT in air passengers
- who may be at risk
- how to reduce the potential risks

What is DVT?

DVT is a serious condition where blood clots develop in the deep veins of the legs. It must be distinguished from blood clots in superficial varicose veins in the legs, called phlebitis, which is much less serious.

One in every hundred people who develop DVT dies. The cause of death is usually a blood clot, travelling from the legs to the lungs. This is called pulmonary embolus or PE. When PE is severe it causes the lungs to collapse and heart failure.

Treatment of DVT and PE is with blood-thinning drugs or anticoagulants, including warfarin and heparin. Aspirin in low doses also acts as a blood thinning drug and is used to prevent clotting conditions in the arteries like coronary thrombosis. Its benefit in preventing DVT is debatable. DVT combined with PE or other blood clots is often referred to as Venous Thrombo-Embolism or VTE.

Who is at risk from DVT

Every year DVT occurs in about 1 in 2000 people in the general population, ranging from less than 1 in 3000 in people under the age of 40 up to 1 in 500 in those over 80.

The risk of DVT and PE is greater in people

- over 40 years of age
- who have had blood clots already
- with a family history of blood clots
- suffering from or who have had treatment for cancer
- with certain blood diseases
- being treated for heart failure and circulation problems
- who have had recent surgery especially on the hips or knees
- who have an inherited clotting tendency

DVT is also more common in women who

- are pregnant
- have recently had a baby
- are taking the contraceptive pill
- are on hormone replacement therapy or HRT

These groups make up 90 to 95% of all those who get DVT and/or PE.

The risk of DVT from air travel

There is some evidence that long-haul flights, especially when passengers have little or no exercise, may increase the risk of developing DVT. Information on the proportion of people who develop DVT related to air travel is limited; new research from New Zealand suggests that as many as 1% of long-haul travellers may develop the condition. Also, it is not easy to decide whether the flight itself caused the DVT/PE or whether these people were at risk for other reasons. This is because

- DVT and PE are relatively common conditions anyway and
- more people than ever now travel by air every year

While it is difficult to be certain what the exact causes of travel-related DVT are, experts agree that lack of exercise or immobility are major underlying risks. They have also identified that people at increased risk of DVT/PE in general are those more likely to develop travel-related DVT/PE.

What are the signs of DVT?

You may get swelling, pain, tenderness and redness especially at the back of the leg below the knee. This is different from the mild ankle swelling that many people get during long haul flights and DVT usually though not always affects only one leg. These complaints may develop during the journey but more commonly hours or even days later. The pain may be made worse by bending the foot upward towards the knee. In some cases there may be no signs or symptoms of DVT at all in the legs and problems only become obvious when a pulmonary embolus or PE develops from the clots in the legs. Fortunately PE is rare. PE can cause breathlessness, chest pain and in severe cases, collapse. Both DVT and PE, whatever the cause, are serious conditions and need urgent investigation and treatment.

How to reduce the possible risks

Simple in-flight exercises and getting up and walking around regularly are advised. And avoid dehydration - take regular non-alcoholic drinks.

Before the trip

Consult your doctor if you have

- ever had a DVT or PE
- a family history of clotting conditions
- an inherited tendency to clot (thrombophilia)
- cancer or had treatment for cancer in the past
- undergone major surgery in the last three months
- had hip or knee replacement within the last three months or
- ever suffered from a stroke

Some experts advise that people who have had hip or knee replacements should postpone long haul flights for three months after surgery. If you have had this kind of surgery, talk to your family doctor, travel clinic staff or a member of the surgical team.

You may need advice on in-seat exercises, especially leg exercises to keep the circulation active and reduce the risk of developing a DVT. Some information is provided below. More information is available in literature provided by travel agents, and in the in-flight leaflets magazines and videos now produced by many airlines.

You may also need to discuss treatment with blood-thinning drugs or the use of elastic stockings if you are in a high-risk group. While there is some evidence that elastic stockings may be useful there is no evidence that aspirin is effective in preventing travel-related DVT or PE. Elastic stockings are widely available from pharmacies and pharmacists can provide advice on use and fitting. Because aspirin can have serious side effects like bruising, bleeding from the gut and allergies you should consult your doctor before deciding to take this drug. People taking aspirin already should not increase the dose.

Women taking the 'pill' or on hormone replacement therapy (HRT) should do the exercises described in this advice to help reduce the risk. They should also discuss the use of elastic stockings with their community pharmacist. Women who are pregnant, or have recently had a baby should seek advice from the antenatal team or the health visitor.

Make sure you have good medical insurance for your trip. If you travel to a European Union country, make sure you have obtained a European Health Insurance Card (EHIC) before you travel. The EHIC is free and is the replacement for the E111. You can obtain one online at the ***Application For European Health Insurance Card website***:

https://www.ehic.org.uk/InternetPROD/home.do

This entitles you to free or reduced-cost emergency treatment only, and therefore you must also be insured.

During the trip

- get comfortable in your seat and recline as much as possible
- bend and straighten your legs, feet and toes while seated every half-hour or so during the flight
- press the balls of your feet down hard against the floor or foot-rest to increase the blood flow in your legs and reduce clotting
- do upper body and breathing exercises to further improve circulation
- take occasional short walks around the cabin, whilst cruising at altitude
- take advantage of refueling stopovers where it may be possible to get off the plane and walk about
- drink plenty of water
- avoid alcohol, which in excess leads to dehydration and immobility
- avoid taking sleeping pills, which also cause inertia

After the trip

For the vast majority of air passengers there will be no problems upon disembarkation. However symptoms of DVT can appear after arrival. If you develop swollen painful legs, especially where one is more affected than the other, or if you have breathing difficulties, see a local doctor urgently or go the the nearest A&E department.

Research into travel-related DVT

More research is needed to explore the connection between DVT and air travel, what the scale of the problem is and effective methods of prevention. The Aviation Health Working Group (AHWG) is an interdepartmental organisation, chaired by the Department for Transport, with representatives from the CAA, Health and Safety Executive and the Department of Health. It meets every two months to discuss issues relevant to aviation health and was instrumental in the decision to form the AHU. This group oversees research and advises the air industry. The group also helps to ensure that further research ties in with that being developed by the World Health Organisation and the international aviation industry.

Please note this information was taken from the Department of Health website at

www.dh.gov.uk/PolicyAndGuidance/HealthAndSocialCareTopics/BloodSafety/DVT/DVTArticle/fs/en?CONTENT_ID=4071438&chk=2OT7NG

No changes have been made to the text, but please check the website for any update.