



Travel before and after orthopaedic surgery

Prevention of DVT / PE



01935 475122
yeovilhospital.nhs.uk



This leaflet gives pre-operative and post-operative guidelines for patients flying (or travelling long distances by car, bus or train) with a journey of more than four hours in length.

What is a DVT / PE?

DVT (Deep Vein Thrombosis) is a blood clot which can occur within the deep veins of the legs due to prolonged sitting or immobility. A PE (Pulmonary Embolism) is a clot within the lungs, which usually has travelled from the veins in your legs via your bloodstream.

Risk of DVT when you travel

When travelling for prolonged periods (four hours or more), whether by plane, bus, car or train with prolonged sitting and reduction in movement, your risk of developing a DVT increases. This can also be true if you take multiple flights over a short period. Your risk may remain higher after travel for as long as four weeks.

The following factors may increase your risk of a DVT

- A blood clot in your legs or your lungs previously
- Known pre-disposition to blood clots (thrombophilic disorder)
- Cancer
- Recent surgery or physical injury
- Immobility (reduced movement)
- Age (> 60)
- Oestrogen use including oral contraceptives
- Pregnancy
- Obesity (Body Mass Index > 30)

Body Mass Index (BMI)

BMI is used to determine if you are within the correct weight limits for your height. To calculate your BMI you divide your weight (in kilograms) by your height (in metres) squared. This will be done for you in the pre-operative clinic before surgery.

Guidance on travel before surgery

If travelling for four hours or more before surgery, a scoring system has been devised (below) to help you and our team in the pre-operative assessment clinic to work out how long your

surgery may need to be delayed. However, please remember this is only a guide for you to consider, as it is impossible to calculate absolute risk.

Factor	Score
Age > 60	1
BMI > 30	1
Active cancer, or undergoing cancer treatment	2
Known thrombophilic disorder	1
On HRT or tamoxifen	1
Varicose veins	1
General health problems (High blood pressure, diabetes, stroke, heart or lung problems)	1
Previous blood clot	2
Parent or sibling has had blood clot	1
Due for lower limb surgery lasting > 60 minutes	1

Your total score

Score 0 - Okay to have surgery one week after long travel

Score 1 - Suggest delay of two weeks between long travel and surgery

Score 2 or more - Suggest delay of four weeks between long travel and surgery

If your surgery is more urgent, then the risks of proceeding will need to be assessed and discussed with you by your surgeon / anaesthetist.

Guidance on travel after surgery

This is a rough guide to be considered when travelling after an operation, taken from advice issued by the civil aviation authority and the NHS choices website. You should consider your individual risk, taking into account all of the factors described above, and discuss with your doctor if you are unsure.

- **Most minor orthopaedic operations** - wait at least 24 hours after surgery (eg. keyhole surgery and other operations lasting less than 60 minutes)
- **Major upper limb surgery** - wait at least seven days after surgery (eg. open shoulder surgery)
- **Leg operations lasting > 60 mins** - wait at least seven days after surgery (eg. knee ligament reconstruction, hindfoot surgery)
- **Hip or knee joint replacement** - risk of travel-related DVT is increased for three months, so avoidance is advised.

Plaster cast applied – OK for short flight (< two hours) after 48 hours. For longer flights, casts should be split to avoid problems with soft tissue swelling. The risk of DVT is higher with lower limb casts, especially if not weight bearing, and active precautions should be considered which you need to discuss with your doctor.

We would advise you, if flying after an operation, to check with your airline as they may have their own guidance / policy in place, and make sure that your travel insurance providers are informed (which may increase the cost, but otherwise you risk having your cover cancelled).

Recommendations to reduce DVT risk when flying

- Make sure you get up and walk about regularly when permitted during a flight
- Try to complete calf muscle stretches at least every hour
- Make sure you drink plenty of fluids (not alcohol) to avoid dehydration
- Consider the use of compression stockings if you have multiple risk factors

If you would like this leaflet in another format or in a different language, please ask a member of staff.