Outpatient anticoagulant service

Travelling and thrombosis risk

There is evidence that long distance travel is a risk factor for the development of thrombosis. It is often described as **traveller's thrombosis** instead of economy class syndrome as thrombosis attributable to prolonged immobility also occurs in association with any form of long distance travel, by car, bus, rail ferry or plane. The longer the length of travel the greater the risk and it is not confined to air travel.

There are precautions you may consider to minimize your risk of both deep vein thrombosis (DVT) and pulmonary embolism (PE) for continuous journeys lasting more than three hours.

**Common sense measures for all travellers and low risk group**

This includes people with no:

- history of DVT or PE
- surgery in the previous four weeks
- other risk factors mentioned in moderate and high risk groups

**Recommendations**

- Maintain your mobility; do not sit for long periods, particularly with pressure on the back of your thighs. Avoid crossing your legs when sitting and make frequent changes of position, such as taking a walk.
- Avoid sleeping tablets as they may also contribute to longer periods of immobilisation.
- Regularly flex your ankles to contract your calf muscles.
- Maintain hydration by drinking plenty of water and soft drinks and minimising alcohol and caffeine intakes. Remember that air conditioning, excess heat, diarrhoea and vomiting and inadequate fluid intake can all cause dehydration.

**Moderate risk group**

This group may include people who:

- Have had a DVT/PE in the past
- Have had trauma or surgery under a general anaesthetic lasting more than 30 minutes in the previous two months, but not within the last four weeks.
- Are obese
- Have varicose veins
- Are pregnant or in the post partum period
- Have lower limb paralysis or lower limb trauma within the previous six weeks.
- Are taking female hormone therapy (either the oral contraceptive pill or hormone replacement therapy).
Recommendations
- Follow the common sense measures suggested above for low risk travellers.
- Wear well fitted below knee compression hosiery, which are also called travel socks.

High risk group
This group may include people:
- Who have had surgery under a general anaesthetic lasting more than 30 minutes in the last month.
- With active cancer.

Recommendations
Follow the low and moderate risk measures suggested above.
Ask your doctor to consider prescribing for appropriate pharmacological anticoagulants as prophylaxis, either;

- **A** Low molecular weight heparin (LMWH) subcutaneous injection may be given by self-administration one to two hours prior to the start of the journey.

Or

- **B** Rivaroxaban 10mg orally one to two hours prior to the start of the journey.

What are the symptoms of a DVT or PE?
- pain and/or swelling in the leg
- chest pain
- shortness of breath

Please note that a DVT can occur some days or even weeks (up to eight weeks) after a trip.

Special considerations
If you have had a thrombosis in the past and now think you could have other risk factors that could increase your risk of another thrombosis, you should discuss with your doctor if pharmacological thromboprophylaxis is appropriate. Either LMWH or Rivaroxaban 10mg orally one to two hours before each flight/journey (off license).

If you have a plaster cast on a lower limb, please discuss with your doctor whether the cast should be split prior to a flight.

Any person who has recently had a DVT/PE diagnosed and is taking anticoagulant therapy should seek advice from their doctor if taking long distance travel within four weeks of diagnosis.
Remember
The risk of developing travel related DVT or PE is small. You can benefit from following suggestions on how to minimise your risk.
Anyone who develops pain or swelling in their legs, chest pain and/or shortness of breath after a long journey should seek medical advice.
Aspirin has not been shown to be effective in reducing the risk of traveller's thrombosis.
There is no evidence demonstrating supporting an association between dehydration and travel associated thrombosis.
Any person taking oral anticoagulation is already taking pharmacological precaution against the development of thrombosis.

References

Our aim is to care for you safely and effectively.