

## Travel Related VTE

### Background

There is evidence that long distance travel is a weak risk factor for the development of VTE. The most common finding is asymptomatic calf vein thrombosis. VTE can be attributable to travel up to 8 weeks post journey.

The incidence of VTE in low/intermediate risk flyers is 0.0002% after flights of 4-8 hours duration. This rises to 0.5% in flights >8 hours. Severe symptomatic PE is extremely rare if flight duration <8 hours. If flight duration is >12 hours, the incidence is 5/million.

### Screening for risk factors

The risk of travel related VTE is higher in individuals with pre-existing risk factors for VTE development.

Risk should be assessed on an individual basis.

**Table 1 Risk factors for development of VTE**

<b>Risk Group</b>	<b>Example</b>
<b>Low</b>	None
<b>Intermediate</b>	<6 weeks post partum Previous unprovoked VTE Travel related VTE (with no associated temporary risk factor) Combination of risk factors All other factors
<b>High</b>	Major surgery within the last month Active cancer (undergoing chemo/radiotherapy in last 6 months, awaiting therapy or palliative phase)

### Strategies for prevention of travel-associated DVT

- Global use of compression stockings/anticoagulation is not recommended.
- There is no evidence of a causal link between dehydration and travel related VTE. Therefore excess hydration is not recommended.
- There is some indirect evidence that maintaining mobility during a flight may prevent travel related VTE. Thus maintaining mobility in all journeys >3 hours duration is reasonable.
- Travellers at the highest risk of travel related thrombosis undertaking journeys >3 hours should wear below knee compression stockings.
- If pharmacological prophylaxis is appropriate, anticoagulants are recommended as opposed to antiplatelet agents. This is derived from experience of superior thromboprophylaxis with anticoagulants in other clinical settings. The usual contraindications to anticoagulation need to be borne in mind.

Travel duration	<3 hours	3-8 hours	>8 hours
<b>Risk group</b>			
<b>Low</b>	Nil	Nil	Nil
<b>Intermediate</b>	Nil	Nil/Stockings	Stockings
<b>High</b>	Nil	Stockings	Stockings +/- anticoagulation

### References

Guidelines on travel related venous-thrombosis. Watson et al. British Journal of Haematology. 2011; 152(1). 31-34