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EXTENDED TRAVEL AFTER TOTAL HIP ARTHROPLASTY

“Medical tourism” is becoming increasingly common and patients travel across the country and overseas.

Hip arthroplasty surgery (THA) and extended travel are each individually recognized as risk factors for the development of deep venous thromboembolism (DVT), but the additive risk of these independent factors is still unknown.

RISK WITH THA

The risk of DVT after THA is higher in patients with the following predisposing factors: malignancy, chemotherapy treatment, antiphospholipid syndrome, immobility, personal history of previous DVT, taking oral contraceptives or estrogen, morbid obesity, stroke, atherosclerosis, physical status ASA 3-4.

But 50% of DVT occur without any clinical predisposing factors.

With good prophylaxy, the incidence of proximal DVT as determined by routine ultrasound or venogram screening can be reduced to approximately 5%, and the rate of symptomatic DVT reported in studies not using routine screening is approximately 1% to 4%. Despite the lower rate of DVTs reported with chemoprophylaxis, the incidence of fatal PE remains at approximately 0.1%.

Prevention consists on :

- chemical prophylaxy (with either an injectable low molecular weight heparin, or with warfarin)
- early post-operative mobilisation and quick rehabilitation.
- thigh-high compression stockings placed at the time of surgery and these were continually used throughout the hospital stay and instructed to continue with full-time use for a total of 3 weeks
- frequent foot pump exercises at least once every 1 to 2 hours

RISK WHEN TRAVELING

There have been reports of DVTs and PEs after prolonged travel. Blood stasis is to be considered the primary prothrombotic factor associated with travel.

The hypobaric environment in airplanes, fluid retention and hemoconcentration in the lower extremities have also been suggested as causative factors.

In the recent study of Ball, there were no fatal PEs, and no nonfatal, symptomatic PEs, and only 5 (0.82%) symptomatic DVTs were identified on a series of 652 patients traveled greater than 200 miles within 6 weeks of their hip arthroplasty surgery.

We may resume other publications as:

- 1) most patients who develop DVTs or PEs during air travel have underlying risk factors for VTE.
- 2) if VTE risk is negligible in flights lasting less than 6 hours, longer flights correlate with greater risk, and an 8-hour flight appears to be the threshold beyond which thrombosis risk noticeably increases
- 3) Even for flights longer than 8 hours, the risk of symptomatic VTE is only approximately 0.5%.

CONCLUSION

Patients in the perioperative period after hip arthroplasty surgery are clearly considered to be at risk for developing DVT.

However, travelling does not seem to be associated with a higher rate of symptomatic deep venous thrombosis, or known pulmonary embolisms and deaths.

As long as these patients are adequately protected with chemoprophylaxis, they remain at a sufficiently low risk to make travel safe, even extended travel within 6 weeks of hip arthroplasty surgery.

Patients should be advised

- to continue chemical prophylaxis (with either an injectable low molecular weight heparin, or with warfarin)
- to continue thigh-high compression stockings with full-time use for a total of 4 weeks
- to perform frequent foot pump exercises during travel and to stand and/or walk at least once every 1 to 2 hours.

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