

Prevention of venous thromboembolism after total hip and knee arthroplasties in Australian hospitals: A call for concord

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Abstract

Purpose: Venous thromboembolism (VTE) is a leading cause of preventable morbidity and mortality, with total hip arthroplasty (THA) and total knee arthroplasty (TKA) at the highest risk. Safe and appropriate thromboprophylaxis is essential. However, investigations into prescribing practices have only had limited investigation. **Aims:** To describe current VTE prophylaxis regimens in Australian patients following an elective THA/TKA and compare these regimens to an international standard. **Methods:** A retrospective multisite cohort study of patients admitted for a THA/TKA in six tertiary hospitals in Queensland, Australia was conducted over 12 months. Patient and medication data were collected following surgery and for 60 days after discharge to determine changes to their thromboprophylaxis regimen. Results were summarised and compared to NICE guidelines. **Results:** 1,011 patients (43.1% THA, 56.9% TKA) were included and thromboprophylaxis was used in 98.1% of inpatients and in 94.3% of discharge patients for 5.2 (± 5.23) and 29.2 (± 15.9) days, respectively. Low-molecular-weight heparins were the primary drugs for inpatients (71.2%), and aspirin 150mg for discharge (42.0%), most commonly for 6 weeks (31.8%). Generally, a two-staged prophylaxis regimen was implemented; most commonly any anticoagulant as an inpatient, followed by rivaroxaban on discharge (32.7%) or an anticoagulant as an inpatient with aspirin on discharge (26.4%). Overall, adherence to NICE guidelines was low; THA: 8.7%, TKA: 5.9%. **Conclusion:** VTE prophylaxis regimens varied considerably and consequently, adherence to international guidelines was low. There is a need for local, peer-led guidelines to ensure consistent, safe, and effective prophylaxis.

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