Late presentation of Deep Vein Thrombosis Post Total Hip Arthroplasty and Role of Extended Prophylaxis

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INTRODUCTION

It is common practice to administer prophylactic agents up to 10 days after surgery. Most recommendations for application of extended deep venous thrombosis (DVT) prophylaxis up to 28 to 35 days is weak to moderate. However, it may be of benefit to prevent post-surgery venous thromboembolism (VTE) in patients. (1-3)

REPORT:

A 71 years old lady underwent left total hip arthroplasty for avascular necrosis. Immediately post-surgery, the patient was on mechanical and pharmacological anti DVT agents. She was discharged well after 5 days with no prescribed DVT prophylaxis. 2 months later she started to experience left leg swelling associated with calf pain for 3 days. She was limping since the pain started. Ultrasound Doppler revealed left lower limb DVT with extension to left external iliac vein. Subsequently, this patient had been referred to hematology and vascular team for long segment left lower limb deep vein thrombosis. Patient was stared on oral low-molecular-weight heparin for 3 months duration.

Venous thromboembolism (VTE) prophylaxis is indicated while in the hospital after major surgery. Some of the most commonly used guidelines worldwide are those published from the ACCP (2012), AAOS (2011), and the National Institute for Health and Care Excellence (NICE) (2018). (4) Rivaroxaban, apixaban or dabigatran are recommended by NICE guidelines as options for the prevention of venous thromboembolism in adults undergoing elective arrhtoplasty surgery.

There is evidence that the prevalence of asymptomatic deep-vein thrombosis, detected by routine venography after major orthopedic surgery, is lower at hospital discharge in patients who have received 10 days rather than 5 days of prophylaxis. Risk of VTE persists for up to 3 months post-surgery. Prolonged VTE prophylaxis of between 28 to 35 days with low-molecular-weight heparin (LMWH) reduces the frequency of post discharge VTE by approximately two thirds after hip replacement. However, the resultant absolute reduction in the frequency of fatal pulmonary embolism is small. (1)

Prolonged prophylaxis is expected to be of less benefit after knee than after hip replacement. In keeping with current ACCP recommendation that, at a minimum, extended prophylaxis should be used after major orthopedic surgery in patients who have additional risk factors for VTE (eg, previous VTE, cancer).

CONCLUSION:

Perioperative thromboprophylaxis with extended duration at discharge from hospital for, 28- 35 days should be considered to reduce the risk for DVT and improve outcome of the patient.

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