

Low rate of subclinical venous thrombosis in patients with haemophilia undergoing major orthopaedic surgery in the absence of pharmacological thromboprophylaxis

Géraldine Verstraete¹, Catherine Lambert¹, Frank Hammer², Cedric Hermans¹

Affiliations + expand

PMID: 33339074 DOI: 10.1111/hae.14161

Abstract

Background: Deep venous thrombosis (DVT) is a common postoperative complication in patients undergoing major orthopaedic surgery of the lower limbs, such as total hip or knee replacement (THR, TKR). Routine pharmacological thromboprophylaxis with low-molecular-weight heparin (LMWH) or a direct oral anticoagulant agent is strongly recommended in this setting. THR and TKR as well as ankle arthrodesis are frequently performed in people with haemophilia (PWH) and chronic haemophilic arthropathy. Pharmacological thromboprophylaxis in this population remains controversial.

Methods: We report the results of a single-centre prospective study initiated in 2002 evaluating by systematic Doppler ultrasound the incidence of subclinical DVT in consecutive PWH referred for major orthopaedic surgery and not receiving pharmacological thromboprophylaxis.

Results: We included 46 different PWH (39 Haemophilia A, 7 Haemophilia B, 27 severe, 15 moderate and 4 mild forms) undergoing 67 orthopaedic procedures. Most (89.5%) were performed with continuous infusion of clotting factor concentrates. Rehabilitation was usually started on day 1 post-op. No clinical DVT or pulmonary embolism was suspected. In total, there were 5 cases (3 severe, 1 moderate HA and 1 moderate HB) of subclinical DVT which were all distal. Two patients were treated with a short course (10-14 days) of LMWH. The overall incidence of DVT was 7.5%.

Conclusions: These data provide imaging-based evidence that the risk of DVT following major orthopaedic surgery among PWH is low. Identified DVTs were distal and resolved spontaneously in most cases. Systematic pharmacological thromboprophylaxis in this specific population is probably for most patients not required.

Keywords: deep venous thrombosis; doppler ultrasonography; haemophilia; orthopaedic surgery; thromboprophylaxis.