When do 275 Deep Venous Thrombosis after Total Knee Arthroplasty Go Away?

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INTRODUCTION: Total knee arthroplasty (TKA) is a procedure with a high risk of deep vein thrombosis (DVT), but the actual pathogenesis of DVT is often unknown. We investigated the factors associated with the development of DVT after TKA and when they disappear.

METHODS: In a single-center, retrospective study, we included 871 patients who were assessed for thrombus by echocardiography within one week after TKA. Patient background, operative time, blood loss and transfusion volume were investigated. Patients with DVT were treated with antithrombotic medication and followed up until thrombus resolution or organization by echo.

RESULTS: Of 871 patients, 259 patients (29%) 275 limbs had DVT. Women, elderly patients, low body weight, low BMI and preoperative antithrombotic medication were risk factors for the development of DVT (p<0.05). Postoperative Hb was statistically significantly lower in the DVT group (10.9 ± 1.2 vs 11.1 ± 1.4) (p=0.02). 263 (95.6%) DVT were confirmed as resolution or organization, with a mean time from occurrence to resolution of 73.3 days. The mean time of resolution in cases using anticoagulants as DVT treatment was 70.5 days, a statistically significant difference from the mean of 86.1 days in cases using antiplatelet drugs.

DISCUSSION AND CONCLUSION: Patient factors such as gender, age, preoperative antithrombotic drugs and postoperative anemia were suggested to be risk factors of DVT. Postoperative DVT in TKA resolved in an average of 73.3 days with antithrombotic drug treatment and earlier with treatment with anticoagulants.