

## INTISARI

### **PREDIKTOR KEJADIAN PERDARAHAN MAYOR PADA PASIEN TROMBOSIS VENA DALAM (TVD) YANG DILAKUKAN TROMBOLISIS INTRA KATETER DI RSUP DR. SARDJITO**

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**Latar Belakang:** Tatalaksana tambahan pada pasien Trombosis Vena Dalam (TVD) meliputi penghilangan trombus secara dini dengan mempertimbangkan risiko perdarahan. Pilihan terapi penghilangan trombus secara dini lini pertama adalah trombolisis intra kateter. Stratifikasi risiko perdarahan pada pasien TVD untuk dilakukan trombolisis intra kateter masih belum jelas.

**Tujuan Penelitian:** Mengetahui prediktor perdarahan mayor pada pasien TVD yang dilakukan trombolisis intra kateter di RSUP Dr. Sardjito.

**Metode Penelitian:** Penelitian ini merupakan studi observasional analitik dengan desain kohort retrospektif. Penelitian ini dilakukan pada pasien TVD yang dilakukan trombolisis intra kateter di RSUP Dr. Sardjito Yogyakarta periode Januari 2019-Mei 2023.

**Hasil:** Terdapat 107 pasien yang memenuhi kriteria inklusi dan eksklusi, dengan 58 subjek (54,2%) mengalami perdarahan mayor. Sebanyak 72,9%(n=78) subjek merupakan perempuan. Rerata usia subjek penelitian  $51,78 \pm 14,01$  tahun. Berdasarkan analisis multivariat, gagal ginjal (OR 3,03, IK95% 1,15-7,97,  $p=0,025$ ) dan riwayat perdarahan (OR 2,64, IK95% 1,09-6,40,  $p=0,031$ ) merupakan prediktor perdarahan mayor. Usia  $\geq 60$  tahun, hipertensi, anemia, nilai *international normalized ratio* (INR)  $\geq 1,5$ , berat badan  $< 60$  kg, kanker, jenis kelamin perempuan, penggunaan antikoagulan oral sebelum tindakan, dan dosis alteplase tidak bermakna secara statistik ( $p > 0,05$ ).

**Simpulan:** Gagal ginjal dan riwayat perdarahan merupakan prediktor kejadian perdarahan mayor pada pasien TVD yang dilakukan trombolisis intra kateter.

Kata kunci: trombosis vena dalam, trombolisis intra kateter, perdarahan mayor

## ABSTRACT

**PREDICTORS OF MAJOR BLEEDING  
IN DEEP VEIN THROMBOSIS (DVT) PATIENTS  
FOLLOWING CATHETER DIRECTED THROMBOLYSIS (CDT)  
AT DR. SARDJITO YOGYAKARTA HOSPITAL  
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**Background:** Adjuvant management for deep vein thrombosis (DVT) includes early thrombus removal, in regards of bleeding risk. The first line therapy for thrombus removal strategy is catheter directed thrombolysis (CDT). However, bleeding risk stratification to determine DVT patients candidacy for CDT procedure is uncertain.

**Objective:** To determine predictors of major bleeding in DVT patients who undergo CDT procedure.

**Methods:** It was an analytical observational study with a retrospective cohort design. The study was conducted on DVT patients who underwent CDT procedure at Dr. Sardjito Yogyakarta Hospital from January 2019 to May 2023.

**Results:** There were 107 patients (mean age  $51,78 \pm 14.01$  years, 72,8% women) who met the inclusion and exclusion criteria, 58 of whom had major bleeding. Based on multivariate analysis, renal failure (OR 3,03, CI95% 1,15-7,97,  $p=0,025$ ) and history of bleeding (OR 2,64, IK95% 1,09-6,40,  $p=0,031$ ) were statistically significant and independent predictors of major bleeding. Age  $\geq 60$  year-old, hypertension, anemia, *international normalized ratio* (INR) value  $\geq 1,5$ , weight  $< 60$  kg, cancer, female sex, oral anticoagulant usage before procedure, and alteplase dose were not statistically significant in predicting major hemorrhage ( $p > 0,05$ ).

**Conclusion:** Renal failure and history of bleeding are independent predictors of major bleeding in DVT patients who undergo CDT procedure.

**Keywords:** deep vein thrombosis, catheter directed thrombolysis, major bleeding