



Outcomes After Anticoagulation for Patients with Splanchnic Vein Thrombosis Due to Acute Pancreatitis



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Background and Aim

- Splanchnic vein thrombosis (SVT), defined as thrombosis of the portal vein, mesenteric veins, or splenic vein, can be seen in a range of intra-abdominal inflammatory processes including acute pancreatitis (AP), and systemic hypercoagulable states including inherited conditions and acquired such as malignancies and most commonly cirrhosis.
- There is a paucity of data regarding outcomes of SVT due to AP. The aim of this study is to review clinical outcomes of patients with mesenteric or splenic vein thrombosis due to AP who received therapeutic anticoagulation compared to those who did not receive anticoagulation.

Methods

- We performed a retrospective chart review of patients diagnosed with splenic or mesenteric vein thrombosis in the setting of AP at our center from 2008-2021. A total of 395 patients were identified with SVT. 255 patients with portal vein thrombosis were excluded. A further 19 patients with other indications for anticoagulation (e.g., atrial fibrillation, mechanical valve, DVT/PE) were excluded.
- Age, sex, location of thrombosis, and initiation of anticoagulation were recorded. Categorical variables of anticoagulation and no anticoagulation were compared with incidence of death, blood transfusion, EGD and colonoscopy in one year using the Chi-Square test.

Our retrospective study found anticoagulation in splanchnic vein thrombosis due to acute pancreatitis to be associated with increased need for endoscopy.

	EGD in one year	Colonoscopy in one year	Transfusion in one year	Mortality in one year
Anticoagulation (N = 68)	44	17	24	7
No Anticoagulation (N=53)	23	5	14	2
	p=0.0193	p=0.0276	p=0.296	p=0.175

Results

- A total of 121 patients identified as having non-portal SVT in setting of AP without any other indication for anticoagulation. 68 were placed on anticoagulation while 53 were not.
- There was a statistically significant association for incidence of EGD and colonoscopy in one year in the anticoagulation group compared to the group on no anticoagulation.
- While the anticoagulation group was associated with increased rate of need for transfusion (35% vs 26%) and death (10% vs 4%) compared to the group on no anticoagulation, these findings were not statistically significant.

