

Clot-In-Transit: Feasibility with Aspiration Thrombectomy Device

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INTRODUCTION

- ☐ Right heart thrombus-in-transit is considered a medical emergency when concomitant pulmonary embolism is present with limited cardiac reserve
- ☐ Catheter-directed aspiration of right heart thrombus-in-transit is a growing alternative to open embolectomy for patients who are poor surgical candidates or have contraindications to thrombolytic drugs
- ☐ Catheter-directed aspiration offers a minimally invasive approach that can reduce the morbidity associated with surgical treatment

OBJECTIVES

To report patient characteristics and outcomes from a single-center case series of patients with right heart thrombus-in-transit treated with catheter-directed aspiration using the FlowTriever System

METHODS

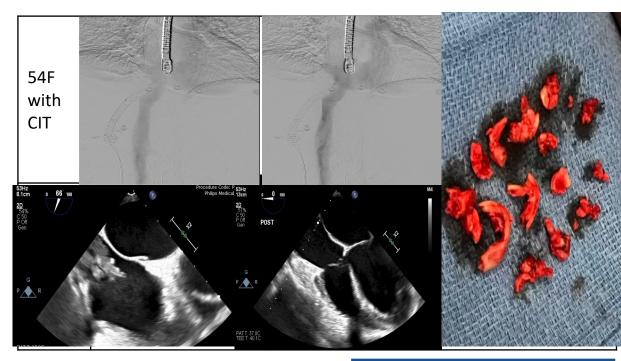
- ☐ Twelve (12) patients with clot-in-transit underwent endovascular thrombus aspiration with the FlowTriever System (Inari Medical) using ICE, TEE, IVUS, and/or fluoroscopic guidance
- ☐ The FlowTriever System is a large-bore thrombectomy system that uses aspiration and mechanical disruption to remove thrombus without lytics

FlowTriever System

PATIENT AND THROMBUS CHARACTERISTICS (N=12)

	n (%)/mean ± SD
Age (years)	57.7 ± 11.5
Female	6 (50%)
Contraindicated to thrombolytics	10 (83%)
Thrombus location	
IVC w/ extension into right atrium	4 (33%)
SVC w/ extension into right atrium	3 (25%)
Isolated right atrium	4 (33%)
Thrombus classification	
Free-floating	3 (25%)
Wall-adherent	7 (59%)
PFO present	1 (8%)
Concomitant pulmonary embolism	7 (58%)
Concomitant DVT	5 (42%)

EXAMPLE THROMBUS-IN-TRANSIT CASES



PROCEDURAL OUTCOMES (N=12)

	n (%)/mean ± SD
Total procedure time (minutes)	123 ± 25
Estimated blood loss (mL)	75 ± 100
Any thrombus removal	12 (100%)
≥ 80% thrombus removal	10 (83%)
100% thrombus removal	6 (50%)

SAFETY AND MORTALITY (N=12)

	n (%)
Intraprocedural complications	0 (0%)
Intraprocedural embolization to PAs	0 (0%)
Survival to Hospital discharge	12 (100%)

CONCLUSIONS

- □ Aspiration thrombectomy with the FlowTriever System had a favorable safety profile for treating thrombus-intransit with RA and caval involvement
- ☐ Effective thrombus removal was demonstrated without embolization to the pulmonary arteries, with most cases achieving at least 80% clearance