

HFSA 6th Annual Scientific Meeting

Abstract Number: 321

Contact Author: Kathleen Harper, DO

Department of Cardiovascular Services, St. Vincent's Medical Center

Category: Clinical Care, Management Strategies

Authors: Kathleen Harper DO, Linda Ruggiero RN, Kevin Lenhart MD, Karen Kellogg RN, Michelle Harper RN, Laurie Shepard RN, Edward Kosinski MD.

Title: The Use of Warfarin in Class III and Class IV Heart Failure Patients: An Independent Risk Factor for Adverse Events

Background: The use of warfarin in patients with severe left ventricular dysfunction remains controversial. It has been reported that patients with severe heart failure (HF) may be hypercoaguable and that as many as 50% will have arterial or venous thromboembolic events.

Methods: 93 patient in our outpatient heart failure clinic with severe left ventricular systolic dysfunction, mean EF 21%, were retrospectively reviewed for the incidence of arterial or venous thromboembolic events over a three year period. Patients were categorized into two groups: those on warfarin and those not on warfarin. The incidence of significant events such as TIA, CVA, pulmonary embolus and DVT were recorded.

Results: Of 93 patients, 46 with a mean EF of 21% were on warfarin and 47 with a mean EF of 20% were not on warfarin. The incidence of embolic events in the warfarin group were 26% (12/46) of which 75% had atrial fibrillation. The incidence of embolic event in the non-warfarin group was 4% (2/47), none of which had atrial fibrillation.

Conclusion: The incidence of embolic events was significantly higher in the group on warfarin and was strongly associated with the presence of atrial fibrillation. Interestingly, the incidence of embolic events was 4% in the non-warfarin group. Differences in outcomes may reflect variable bioavailability of warfarin in a challenging patient population where transient hepatic congestion and hypercoaguability maintain a fine balance. Clearly, the onset of atrial fibrillation provides compelling evidence for anticoagulation and warfarin. Further study should be undertaken in the non-atrial fibrillation, cardiomyopathy population before appropriate recommendations can be given.

Effects of Use of Warfarin on Incidence of Embolic Events

	n	Mean EF	# of Events	Incidence	# of Events and Afib
Group 1			12/46	9/46	9/12
Warfarin	46	21%	26%	19%	75%
Group 2			2/47	0/47	0/47
Non-Warfarin	47	20%	4%	0%	0%