



# 1-Minute Pearls/Pitfalls for the Clinician

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## QUESTION 1: ATRIAL FIBRILLATION — EARLY RHYTHM CONTROL VS RATE CONTROL?

*A 68-year-old active woman with a history of hypertension and CAD is admitted with left hemiparesis which resolved within 18 hours. Brain MRI revealed no infarcts. Her echo showed normal LV function with moderate left atrial enlargement (unchanged from most recent study). Cardiac monitoring however revealed episodes of atrial fibrillation with RVR. Her rate is now well-controlled now after adjustment of her metoprolol dose. She has been started on apixaban and is eager to get back to her active lifestyle with appropriate precautions. She says her goal is to avoid hospitalization as much as possible as she has done since her episode of non-ST elevation myocardial infarction (NSTEMI) 4 years ago. She is still having runs of atrial fibrillation on telemetry, but her heart rates are between 70 to 90 beats/min, and her systolic blood pressure is between 120-130mmHg. In addition to close follow-up with PCP, what does she need?*

A: Recent studies have showed that in addition to rate control, early rhythm control in patients with a recent diagnosis of paroxysmal atrial fibrillation improved clinical outcomes reducing hospitalizations and deaths due cardiovascular complications. The EAST-AFNET 4 trial noted this benefit in cases of paroxysmal atrial fibrillation diagnosed within 12 months.<sup>1</sup> In addition to optimizing rate control and continuation with anti-coagulation for stroke prevention, this patient will therefore need follow-up with a cardiologist/electrophysiologist as an outpatient.

The use of anti-arrhythmic medical regimen or catheter ablation will be at the discretion of cardiology.

## Abstract

This article describes some pearls/pitfalls pertinent to the management of heart failure exacerbation in patients with asymptomatic hypotension along with treatment strategies for patients with new atrial fibrillation.

## QUESTION 2: HOW DO YOU TREAT HEART FAILURE EXACERBATION IN PATIENTS WITH ASYMPTOMATIC HYPOTENSION?

*A 59-year-old man with history of heart failure with reduced ejection fraction, CAD and COPD is admitted with heart failure exacerbation. He is started on IV diuresis, but his scheduled twice daily regimen gets interrupted frequently by episodes of asymptomatic hypotension. His current regimen includes Lisinopril, Aspirin, Atorvastatin, Carvedilol, Spironolactone, and bronchodilators. His echocardiogram showed no new wall motion abnormalities, pulmonary hypertension, or pericardial effusion. His LV ejection fraction is 38% (unchanged from most recent study). His renal function is normal. He still has clinical evidence of volume overload. What should be done about the patient's hypotension?*

A: Patients admitted with volume overload due to heart failure need adequate IV diuresis for symptom management. They need to also continue with ACEI/ARB regimen and other aspect of their goal-directed medical therapy. In cases where hypotension becomes a limiting factor in ensuring adequate diuresis, adjustment in beta-blocker regimen should be made. Options include a dose reduction, temporarily holding the regimen or as in this case switching carvedilol to a cardio-selective beta-blocker with known mortality benefit in heart failure with reduced ejection fraction such as metoprolol succinate or bisoprolol.<sup>2</sup> The alpha blocking activity of carvedilol contributes to its effect on blood pressure.

## Disclosures/Conflicts of Interest

The author has no conflicts of interest to disclose

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