INTRA-AORTIC COUNTERPULSATION FOR HEMODYNAMIC SUPPORT IN PATIENTS WITH ACUTE ISCHEMIC VS. NON-ISCHEMIC HEART FAILURE

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Introduction
Objectives: 1. Evaluate outcome and safety of IABP support in patients with ischemic and non-ischemic Cardiogenic Shock (CS)
2. Identify predictors of early mortality

METHODS
Study type: Retrospective registry review, single center from 1998 to 2010
Sample Size: 489 patients who received IABP support for CS

Subgroups

Primary Endpoint: Overall mortality at 7 and 30 days

Secondary Endpoints:
- Vascular and neurologic complications
- Long-term survival

Results:

- Non-STEMI mortality (14.7%) was significantly lower at 7 days compared to STEMI (27.7%) and CHF (21.7%) p=0.038
- Long-term survival was 38.3% in the overall study population, with no differences between etiologies of CS
- Significant predictors of 30 day mortality include: age> 70 years, EF<40% and mechanical ventilation
Discussion

- IABP represents a safe technology for hemodynamic support in CS with low complication rates for both ischemic and non-ischemic cause of CS
- This observation should encourage physicians not to refrain from using IABP for hemodynamic support in patients with non-ischemic LV support, as well as ischemic

TACTICS’ KEY TAKEAWAYS:

Ischemic Heart Failure

- STEMI - occlusive thrombus - ST elevation (and Q waves) - Cardiac Enzyme elevation
- Non-STEMI - non-occlusive thrombus - NO ST/Q - Cardiac Enzyme elevation

Non-Ischemic HF

- CHF: CHF defined as systolic LV dysfunction from causes other than acute myocardial ischemia, i.e. dilated cardiomyopathy, hypertension or valvular heart disease
- This registry data may reflect more the “real world” on how IABP supports a patient in a critical time of poor hemodynamics
- IABP therapy is a safe technique for hemodynamic support and is rarely associated with complications
- These authors encourage physicians not to “refrain” from using IAB, especially in the non-ischemic HF patient!

How to use:

- Read the article. Remember you do not own it
- Continue to engage in conversations with your cardiologists to understand their “real world” experiences
- Emphasize the safety and cost-effectiveness of IABP therapy for short term hemodynamic support in both ischemic and non-ischemic HF

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