Use Of Invasive Blood Pressure Monitoring In Asymptomatic Mildly Hypotensive Cardiac Patients

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Background
Beta-blockers and Angiotensin Converting Enzyme Inhibitor (ACE-I) are still underused drugs by CAD or CHF patients. Patients with mild hypotension (noninvasive Systolic Blood Pressure (SBP): 80 — 90mm Hg) are often not prescribed these medications.

Methods
Seventy-two patients of Myocardial Infarction or Congestive Heart Failure with asymptomatic mild hypotension who were not on betablockers or ACE-I were subjected to intra-arterial pressure monitoring system using SIEMENS 6002 monitors, Beta-blockers (Metoprolol, Carvedilol) and/or ACE-II (Captopril, or Enalapril) were started and gradually stepped up over a period of 48 to 96 hours.

Results
There was a significant difference of Systolic Blood Pressure (average of 22.4 mm Hg higher with invasive monitoring, with a range of 6 to 34 mm Hg). Diastolic Blood Pressure was not very different (- 4mm to + 10mm Hg). After a mean period of 3.2 (2 to 5 days) monitoring and careful titration. 16 (22.2%) patients successfully tolerated beta-blockers (metoprolol, mean daily dose: 62.5 mg. or carvedilol, mean daily dose: 9.3 mg), 12 (16.6%) patients tolerated ACE-I (captopril, mean daily dose: 37.5mg) and 32 (44.4%) patients could tolerated both. Thus, 60 out of 72 (83.3%) patients could be offered betablockers, ACE-I or both.
Conclusions

Patients of Myocardial Infarction or Congestive Heart Failure may have lower non-invasively Measured Systolic Blood Pressure. Many of the asymptomatic mildly hypotensive patients may be offered the benefit of ACE-I and/or Beta- blockers by careful short-term invasive Blood Pressure Monitoring.

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