

The Demographic, Clinical Characteristics And Early and Late Mortality of Patients Treated with IABP in the Coronary Care Unit

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Background: IABP is a common intervention in acute heart failure. The objectives of this study were determination of demographic, clinical characteristics and mortality predictors of these patients.

Patients and methods: The data of patients treated with IABP between 2001 and 2009 were collected from the electronic database at our institution.

Results: Overall, 224 patients have been treated with IABP: 79% were males, mean age was 64 (range 29 – 102), 36% had DM; 67% were in cardiogenic shock, 42% had pulmonary edema; 92% underwent cardiac catheterization. PCI was performed in 74%, IIB IIIa antagonists were given in 59%. Echocardiography was performed in 194. Mean LVEF was 35.2%, EF of 30% or less was in 42%; mitral regurgitation in 45%; mean SPAP was 42.15 mm HG, SPAP of 45% or more was present in 41%.

Twenty six percent of patients died within 1 month, 31.5% after 3 months, 34% after 1 year. During the follow-up (up to 8 years) total mortality was 40%. Early (30 days) mortality was significantly ($p < 0.05$) associated with advanced age, female sex, diabetes, cardiogenic shock, and pulmonary edema. LVEF did not affect early mortality.

Late mortality was significantly associated with the same factors as the early one, but also by hypertension, low (30% or less) EF, and mitral regurgitation. A borderline ($p = 0.07$) association was found between elevated (45 mm Hg or more) SPAP and mortality. Performance of cardiac catheterization, PCI, and treatment with IIB IIIa antagonist had a significant protective effect on both early and late mortality.

Conclusion: The majority of patients treated with IABP were males, 2/3 developed cardiogenic shock. Age, female sex, and poor hemodynamic status were associated with both early and late mortality. Low EF and MR were associated only with late mortality. Performance of cardiac catheterization, PCI, and treatment with IIB IIIa antagonists may be life saving. Patients surviving 3 month have a good chance of prolonged survival.