

## Prolonged Intra- Aortic Balloon Counterpulsation Support: Patients Clinical Profile and in Hospital Course: Four Years Analysis from the ABCD-1 Trial (Aortic Balloon Counterpulsation Device).

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**Background:** Intra aortic balloon pump (IABP) is used for varieties of cardiovascular emergencies. The literature describes the patients who will benefit from this device, however, the patients clinical profile and course under prolong mechanical support is not well established

**Aim:** To characterize patients profile who need long term mechanical support.

**Methods:** Data was gathered from computerized medical records in 162 consecutive patients who underwent IABP insertion between the years 2004 - 2008.

Patient's clinical characteristics, indication for balloon insertion and in hospital outcome are presented.

**Results:** IABP therapy was divided into two groups: < 4 days and  $\geq$  4 days.

	IABP <4 d (N=109)	IABP $\geq$ 4 d (N=53)	P- Value
Age	66.8 $\pm$ 14.1	67.8 $\pm$ 11.4	0.63
Male	80(73.4%)	33(62.3%)	0.15
Diabetes Mellitus	47(43.1%)	33(62.3%)	0.02
Prior stroke	21(19.3%)	22(41.5%)	<0.003
PVD	25(22.9%)	17(32.1%)	0.21
Renal failure	23(21.1%)	19(35.8%)	0.04
Anterior MI	57(52.8%)	32(60.4%)	0.57
LAD	38(36.9%)	27(54.0%)	0.06
Cardiogenic shock	32(29.4%)	17(32.7%)	0.88
Pulmonary edema	9(8.3%)	10(19.2%)	<0.008
Mechanical ventilation	42(38.5%)	28(52.8%)	0.09
Clopidogrel +IIB/IIA	56(51.9%)	40(75.5%)	<0.006
Moderate- Severe MR	19(19.6%)	18(36.0%)	0.03
Need for CABG	48(44.0%)	15(28.3%)	0.05
<b>In- Hospital Course:</b>			
Major Bleeding	25(23.8%)	25(48.1%)	.070
Congestive heart failure	35(33.4%)	35(68.6%)	<0.0001
Acute renal failure	43(41.0%)	38(73.1%)	<0.0001
Sepsis	18(17.1%)	24(46.2%)	<0.0001
In- hospital mortality	18(16.5%)	10(18.9%)	0.71

**Conclusion:** Prolong IABP therapy was needed mainly in diabetics, in patients with CHF, prior strokes and those who were treated by aggressive antiplatelet regimen. Long term use of this therapeutic modality was associated with detrimental hospital course.