HEB

OUTCOME OF PATIENTS WHO REQUIRE IABP IN CORONARY CARE UNIT

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Introduction: IABP is a **MCS device** which augments coronary blood flow and reduces afterload, cardiac work and myocardial oxygen consumption. Current indications include ACS/Non-ACS CS, high risk PCI, VSR/MR following MI and arrhythmia refractory to medical treatment.

Aim: To study various clinical outcomes, MACCE, complications and factors that determine MACCE in patients who have undergone IABP insertion.

Methods:

Study site: MMM CCU

Study population: Pts presenting to MMM ER with various indications for IABP.

Study design: Prospective, longitudinal , observational study

Sample size: 105

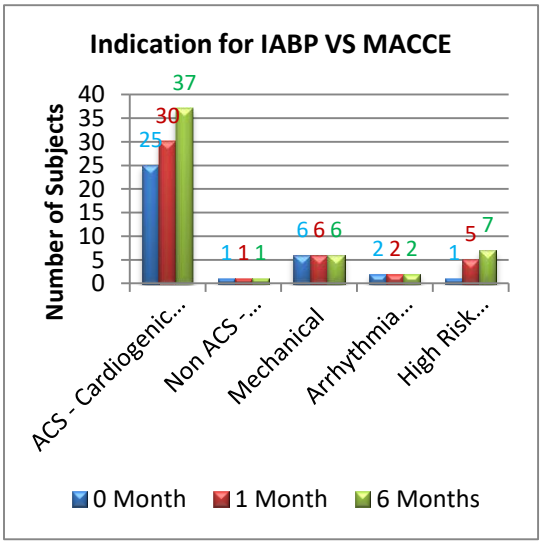
Time period: 1-12-2016 to 30-11-2017 (1 yr)

Inclusion: Pts with cardiogenic shock (ACS/ Non ACS) , mechanical complications following MI, refractory arrhythmias

Exclusion: No intrinsic cardiac activity, CPR> 30 min, severe PAD, > mild AR, age > 90 yrs

Indication for IABP VS MACCE

Independent Variables	MACCE at 6 months		
	Adjusted Odds Ratio	95% Confidence Interval	P value
Age > 50 years	1.84	0.88-2.65	0.126
Gender - Male	1.62	0.56-3.84	0.117
Diabetes	1.91	0.33-3.42	0.216
Hypertension	1.32	0.76-1.89	0.112
CKD	1.16	0.98-2.49	0.061
Cardiogenic Shock	2.45	1.12-4.78	0.040*
LVEF< 30 %	4.37	3.71-7.63	0.007*
Mechanical Complications	1.62	0.56-3.84	0.074
Mechanical Ventilation	10.18	1.09-94.73	0.042*
No Reperfusion Therapy	3.74	1.46-7.21	0.022*
AKI	4.29	1.12-16.52	0.039*
IABP Duration ≥ 6 days	3.58	1.15-11.13	0.043*



Results:

- Age , Gender, DM, HTN , Smoking , Dyslipidemia, CKD **did not** affect the IABP running time.
- 84.9% pts - were in CS,
- 98.11% pts - had LVEF < 45%, 51% pts has EF <30%
- 72.64% - underwent IABP insertion due to ACS/CS
- 9.4% pts had VSR / severe MR, 33% pts - AKI
- 5.66% pts develop IABP complications, 15%-RRT
- 50% pts had MACCE at 6 months,
- Event free survival- highest for non ACS- CS
- MACCE – 10 times > in pts on Mech ventilation

Discussion:

- Baseline characteristics and clinical profile of the patients was comparable to studies done in the past
- In hospital survival – 68% , 50% pts – MACCE at 6 months – 36% pts had died , 12%pts had HF admission , 1% pts had stroke , 1% pts underwent repeat revascularisation.
- In hospital mortality highest on 1st day. MACC events – highest for mechanical complications following MI.
- IABP complication were -infection at the site (2%) ,hematoma (1%), limb ischaemia (2%) , stroke (1%)
- Pts on MV, EF<30% , AKI, IABP duration ≥6 days , CS – significant predictors of MACCE at 6 months.

Conclusions:

- Overall MACCE : 50% at 6 months
- Pts developing MACCE : highest for ACS/CS as regards no of pts, events highest for mech compln.
- IABP complications – observed in 6% patients & risk factors were dyslipidemia, DM, Smoking Systemic HTN
- Statistically significant predictors of MACCE at 6 months were mech. ventilation, LVEF < 30%, AKI , no reperfusion therapy, IABP ≥6 days & CS.
- Pts in the 1 day and ≥6 days IABP duration groups had higher MACCE in hospital & at 6 months.

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