WCC 2016-120 : Role of BMS in DES era in females. Chanikya Kishore, M. Jyotsna.

Introduction

Percutaneous coronary intervention (PCI) with stent implantation has replaced balloon angioplasty, due to a reduction in the incidence of restenosis. However, an in-stent restenosis rate of 10–40% has been a significant problem in bare-metal stent (BMS) implantation . Recently-developed drug-eluting stents (DESs) have reduced the rate of restenosis . However, the higher cost of DESs and the risk of stent thrombosis are major limiting factors. The health policy of Andhra Pradesh State in India is to provide minimum treatment facility for below poverty line coronary artery diseased patients requiring PCI,so it is funding for low cost BMS implantation during PCI. We retrospectively studied the cardiac events in BMS implanted female patients.

Methods

During 2011,13897 patients have undergone PCI under government health scheme , we have analysed 1442 female patients who underwent BMS implantation between January 2011 to march 2011 and one year follow up was done in 694(48.1%) patients. All patients presenting with acute coronary syndrome and chronic stable angina are included in the study.

Results

we retrospectively sought the cardiac events in 1442 BMS implanted female patients during 1 year follow up. 694 (48.1%)patients were followed for 1year.Demographic features were mentioned in the table

	Number (percentage)
Age (mean)	56.2+10.7
HTN	605(41.95%)
DM	672(46.60%)
Dyslipidemia	690(47.85%)
Mode of presentation	
STEMI	624(43.27%)
NSTEMI	240(16.64%)
UNSTABLE ANGINA	300(20.80%)
CHRONIC STABLE ANGINA	278(19.27%)

In 1442 female patients ,2752 lesions were stented. Procedure data was mentioned in the following table.

	Number
Number of stents	2752
Stent composition	
Stainless steel	1448(52.62%)
Cobalt chromium	1304(47.38%)
Stented vessel	
Left anterior descending artery	1653
DIAGONALS	19
Left circumflex artery	220
Obtuse marginal artery	81
Right coronary artery	759
PDA & PLVB	11
Ramus	8
Graft vessels	1

After BMS implantation 240(34.58%) patients had worsening angina,78(11.23%) patients had worsening heart failure ,3 (0.43%) patients had repeat STEMI,4(0.57%) patients had repeat NSTEMI,22(3.17%) patients had repeat PCI/CABG,21(3.02%)patients died within one year,16(2.30%) patients died due to cardiac cause,3(0.43%)patients developed subacute stent thrombosis,9(0.72%)patients developed late stent thrombosis.

CONCLUSIONS

Our study show that even in present era of DES , BMS implantation is effective and associated with less mortality and less stent thrombosis in female population.