



ACC-i2 with TCT

COMPARISON OF OSTIAL AND CROSSOVER DRUG-ELUTING STENT IMPLANTATION TECHNIQUE FOR MEDINA (0,1,0) OR (0,0,1) BIFURCATED LESION

i2 Poster Contributions

McCormick Place South, Hall A

Saturday, March 24, 2012, 9:30 a.m.-Noon

Session Title: PCI in Complex Lesions

Abstract Category: 8. PCI - Bifurcations

Presentation Number: 2524-323

Authors: *Yasunari Sakamoto, Toshiya Muramatsu, Reiko Tsukahara, Yoshiaki Ito, Tsuyoshi Sakai, Hiroshi Ishimori, Keisuke Hirano, Masatsugu Nakano, Masahiro Yamawaki, Tamon Kato, Hideyuki Takimura, Ikki Komatsu, Takuro Takama, Saiseikai Yokohama-City Eastern Hospital, Yokohama, Japan*

Background: For Medina (0,1,0) and (0,0,1) lesion, stent implantation at ostium of bifurcation may finish with incomplete coverage of lesion and may cause proximal edge restenosis. But if we crossover other branch with stent, additional balloon dilatation for healthy vessels through jailed strut to maintain access route for other branch with single balloon or kissing balloon technique may be needed. So this study was aimed to investigate the outcomes of ostial and crossover stent implantation for Medina (0,1,0) and (0,0,1) bifurcated lesion.

Methods: From April 2007 to December 2009, total 5036 lesions had PCI, and total 1027 bifurcated lesions were treated at our institution. Subject for the study was serial 186 de novo bifurcated lesions classified for Medina (0,1,0) or (0,0,1) and implanted drug-eluting stent (sirolimus-, paclitaxel-, zotarolimus-, everolimus-eluting stent). Subject was divided to 2 groups with different stenting techniques, ostial stent group (OS group) 67 lesions and crossover stent group (CS group) 119 lesions. Primary endpoint was binary restenosis (defined as %diameter stenosis>50% in QCA at follow up angiogram, mean 309±186days from PCI) of main vessel (defined as stented vessel) and also target lesion revascularization (TLR) rate of each group was calculated. Variables were compared over 2 groups retrospectively. Also multivariate predictors of primary endpoint were calculated.

Results: Baseline characteristics were similar. Intravascular ultrasounds usage was 63% in OS group and 69% in CS group (p=0.42). In CS group, additional balloon dilatation for healthy vessels through jailed strut with single balloon 7% and with kissing balloon technique 63% performed. Binary restenosis rate, TLR rate of OS and CS group were 9% vs. 8% (p=1.00), 7% vs. 4% (p=0.50), respectively. Multivariate predictors of primary endpoint were post minimum lumen diameter (p=0.02 OR:0.21) and calcified lesion (p=0.04 OR:4.32).

Conclusion: Ostial stenting technique for Medina (0,1,0) or (0,0,1) bifurcated lesions provided similar outcomes to crossover stenting technique which may be acceptable.