

Initial Experience with a New 8 French Compatible Directional Coronary Atherectomy Catheter – A Comparison with GTO Device

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Background: The FlexiCut (Guidant Corp, CA, USA) is a new directional coronary atherectomy (DCA) catheter that has a shaft of a diameter of 0.76 inch (1.98mm) and adapts to different vessel sizes according to the diameter of the urging balloon (2.5-2.9mm, 3.0-3.4mm, 3.5-4.0mm) and is compatible for 8 French guiding catheters. **Methods and Results:** We compared results in 143 consecutive lesions treated with the FlexiCut to a group of 277 lesions treated with the standard device GTO. Lesions located in saphenous vein grafts were excluded. The groups were comparable in terms of sex, age, and clinical variables. The angiographic success rate in the two groups (Flexicut 96.5% vs GTO 97.5%), the procedural major complications (9.4% vs 13.4%) were not significantly different. Angiographic characteristics and results are shown in the table.

	FlexiCut	GTO	P value
Number of lesions	143	277	
Vessel size (mm)	3.03±0.61	3.21±0.56	0.004
B-2 or C type lesion	77%	82%	0.2
Pre-dilatation	13%	17%	0.4
MLD after DCA (mm)	2.92±0.79	2.52±0.64	0.06
Acute gain after DCA (mm)	1.74±0.70	1.56±0.77	0.0007
Coronary perforation	4.2%	3.8%	0.8
Guiding catheter related complications	2.5%	5.7%	0.08

Conclusion: The results of DCA using the new Flexicut catheter show an improved efficiency with the ones achieved by conventional GTO catheters with a trend for lower guiding catheter related complications.