

Basic technique and indications of DCA

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Directional Coronary Atherectomy (DCA) has a housing with window at the top of the catheter and a balloon at the other side of a housing. DCA shaves the plaque, which is pushed into the window by inflating balloon, by cutter. DCA has such a history; SCA™ was released in 1992, Athero Cath GTO™ in 1995, and Athero Cath BANTAM™ in 1997, however, those catheter basically needed 10 Fr. catheter. New DCA catheter Flexi-Cut™ has been capable to use in Japan since August 2001. This Flexi-Cut™ is compatible for 8Fr. guiding catheter. Those interventionalists who were hesitated to use 10 Fr. catheter at intervention would have great expectation for Flexi-Cut™ because of its compatibility. However, we need the same technique for 8Fr. basically that we have been using for DCA. This time I will explain the basic technique and new Flexi cut™ characteristic.

(DCA)

(A) Basic technique

I will explain the procedure of DCA by Flexi-cut™.

Guiding Catheter; Needs more than 0.087-inch lumen. C curve will be recommended

Guide Wire ; Strong support and coated with TEFLON will be recommended.

DCA catheter; Each size of DCA catheter, S(2.5~2.9mm), M(3.0~3.4mm), L(3.5~4.0mm), is used by reference of coronary artery diameter.

When you insert DCA catheter, it is easy to put into coronary artery pushing it lightly which clockwise twist.

Starting rotator, turn a window to cut point, inflate a balloon, and then withdraw a cutter. Putting the switch of motor drive unit on, start to cut by pushing a lever up.

It needs attention when the lever is pulled back because a cutter may not goes the same direction as the first time.

IVUS diagnosis must be performed in all lesions to decide a direction of cutting.

LAD lesion; Diagonal branch will be a marker in RAO view.

RCA lesion; Wire bias will be a marker in LAO view.

LCX lesion; OM, LAO will be marker in AP-Caudal view.

(B) Lesion which is indicated to DCA treatment.

The lesions that DCA catheter enable to be accessed and also have over 2.5mm diameter are indicated to DCA treatment.

The thrombotic lesion, sever calcific lesion and sever bend lesion are not indicated to DCA treatment.