rotational atherectomy can be one of the best ways to enhance proper stent placement.

From August 2006 to August 2011, there are 253 patients with 289 lesions received RA in our heart centre, transradial approach. (Age 73 ± 12 years, Type A 23 cases, Type B1 25 cases, Type B2 154 cases, Type C 87 cases).

Methods Guiding Selection by Right Side Transradial Approach include:

LAD: EBU 3.5

CX: AL1-1.5; EBU3.5

RCA: AL0.75-1; JR 3.5-4

Burr/artery ratio is 0.55 ± 0.08 , Burr side 1.25~1.75 mm, Adjunctive Balloon

246 (85%), Stenting rate after Rota is 100%. Most lesions (>90%) we used RA are heavy calcified lesions in our centre, over 60% patients received IVUS before RA, most calcification is over 180°. The meaning of IVUS:

Viewing site and range of calcification

Selection of burr size

Observation of complications

Quality of stent deployment

If the IVUS catheter cannot pass the lesion, or the lesions cannot be dilated by a balloon at low pressure (6–8 atm), we select Rotational Atherectomy without IVUS test. In some cases with ostial lesions, 'hard' but no calcified lesions, we also select RA. We often select 'small' burr, such as 1.25 and 1.5 mm, to do RA, the purpose of RA in our centre is to make the stent delivery smoothly, and debulks atherosclerotic plaque at the same time. After RA, we dilate the lesion with low pressure about 6–8 atm, and then, put stents. We use Post-dilation as possible as we can. Following are good ways to decrease complications depending on our experience:

Increasing burr size step by step

Reasonable Burr/artery ratio (0.5–0.7)

Maintaining SBP ≥ 100 mm Hg

Enough time for observation coronary flow between two rotations

Results Procedure success rate is 98% (283/289); In-hospital major complications after RA are low:

Perforation 2 (0.69%); Dissection 3 (1%); Side branch occlusion 0; Slow flow/no flow 5 (1.7%); AMI 0; Non-AMI 3 (1.2%); Abrupt closure 0; CABG 0.

Conclusions During DES era, RA is more useful technique for the patients with complex lesions, especially calcified and non-dilatable lesions. The purpose of RA is to making a high quality of deployment of stent instead of big debulking as possible. In our centre, RA procedure success rate is high with the low rate of complications.

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COMPLEX CORONARY LESIONS AND ROTATIONAL ATHERECTOMY FROM SINGLE CENTRE EXPERIENCE

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Objectives During past few years, Interventional cardiologists have met more and more challenge cases. Rotational atherectomy uses a tiny rotating cutting blade to open a narrowed artery and improve blood flow to or from the heart. Pre-treating calcified lesions with