Szabo Technique

Feasible And Safety Stenting the Ostial Lesion

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Introduction

- PCI with stent at ostial coronary lesion is technically difficult, because the stent should be implanted precisely at the ostium.
- It poses special challenges for interventional cardiologists.
CASE

- Mr. AF (54 years old)
- Dx Stable Angina CCS II-III, 1VD
- Risk Factor: Dyslipidemia.
- Lab: other than lipid were within normal limit.
- ECG: SR, Antero Lateral Ischemia.
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ECG
Ostial stenosis in LAD

Bifurcation Lesion classification is Medina 0-1-0
Pull back the stent 2 mm from the cover stent

Szabo technique

Inflated prox stent strut about 2 mm length at 4 atm

Deflated and we have prox stent strut
Szabo technique

Insert stiff/distal part of side branch guide wire of LCX to the most proximal stent strut.
Be careful of balloon perforation when inserted side branch wiring through most proximal stent strut.

GW to LAD
GW to LCX
GC XB 3,5/7 F. Double wire Rinato to LAD, BMW to LCX. Predilatation ostial LAD with balloon Jive 2,0 x15 mm.
With gentle push, the stent precisely positioned at ostial LAD (The side branch wire to LCX would hold the most prox stent strut precisely at the LAD ostium).

Stenting Firebird 3.0x29 mm at ostial-prox LAD at 15 atm.
Why Stent should be implanted precisely at the ostium?

- “Geographic miss” that uncovered by a stent can result in early restenosis.
- If the stent is placed proximally, the side branch vessel ostium could be jailed by the stent.
- Cardiac motion can cause whole angioplasty apparatus swing making difficult a precise stent positioning if only relying solely on angiography.
RISK OF SZABO TECHNIQUE:

1. The stent was eventually dislodged and stripped off balloon with the final stent loss. In this case the two wires were probably not positioned deeply enough into coronary arteries. This reduced the back up support and finally led to important wire pull back during stent advancement.

2. Ballon perforation when inserted side branch wiring through most proximal stent strut.

3. Trapped side branch wire if to late pullback this wire before maximal stent inflationation espesially in calsified lesion.
Szabo technique offers many advantages for stent implantation of ostial lesion over traditional methods.

Szabo technique is safe and feasible for PCI in ostial coronary artery lesions with a high angiographic success rate.

One of clear advantages of this technique is to allow interventional cardiologists to overcome visual limitations for precise ostial stent implantation and without relying solely on angiography, the precise stent implantation at ostial lesion is feasible without side-branch compromise or proximal protrusion.

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