

Szabo Technique

Feasible And Safety Stenting the Ostial Lesion

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Introduction

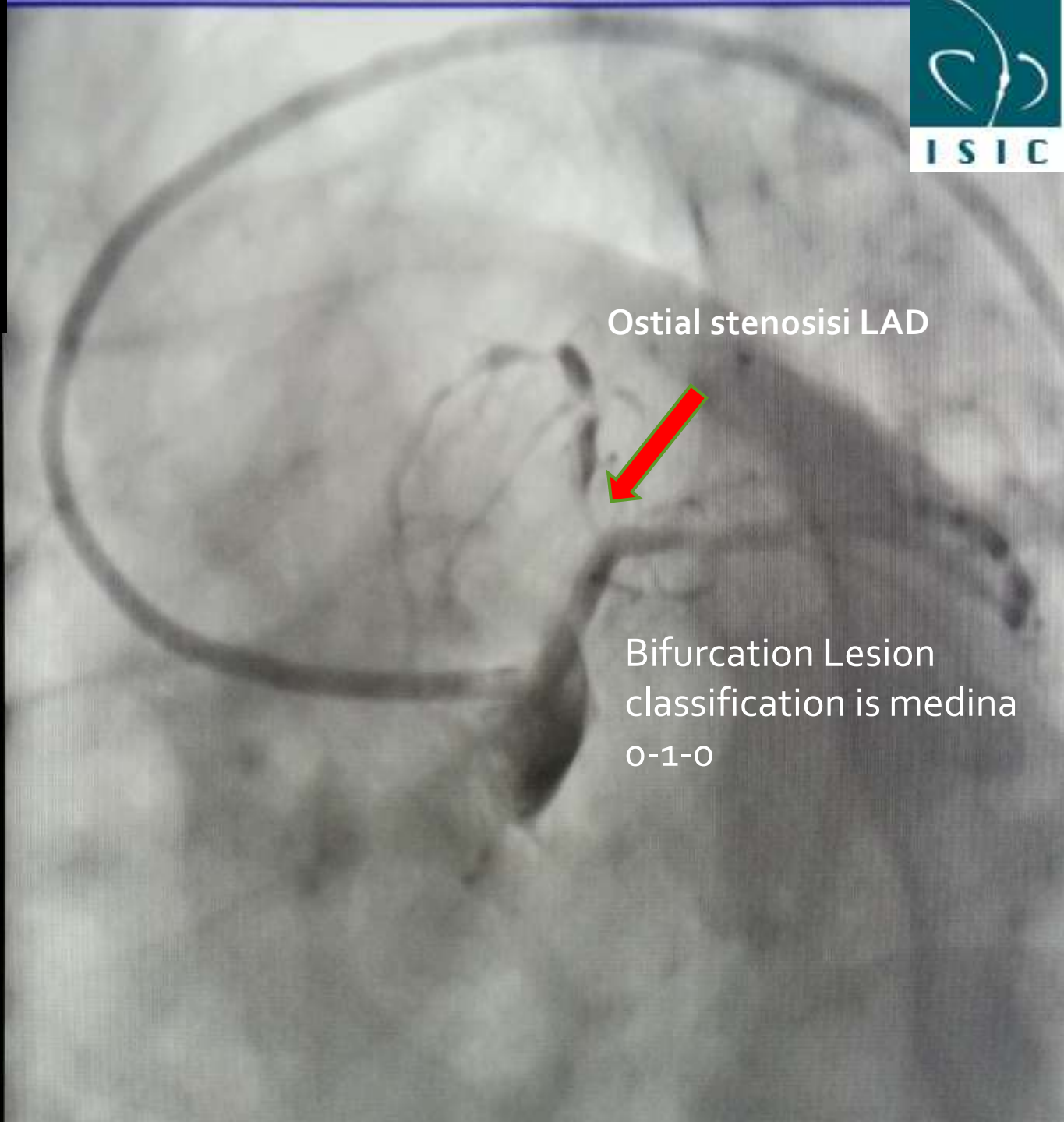
- PCI with stent at ostial coronary lesion is technically difficult, because the stent **should be implanted precisely at the ostium.**
- It poses special challenges for interventional cardiologists.

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.

ECG





Ostial stenosis LAD



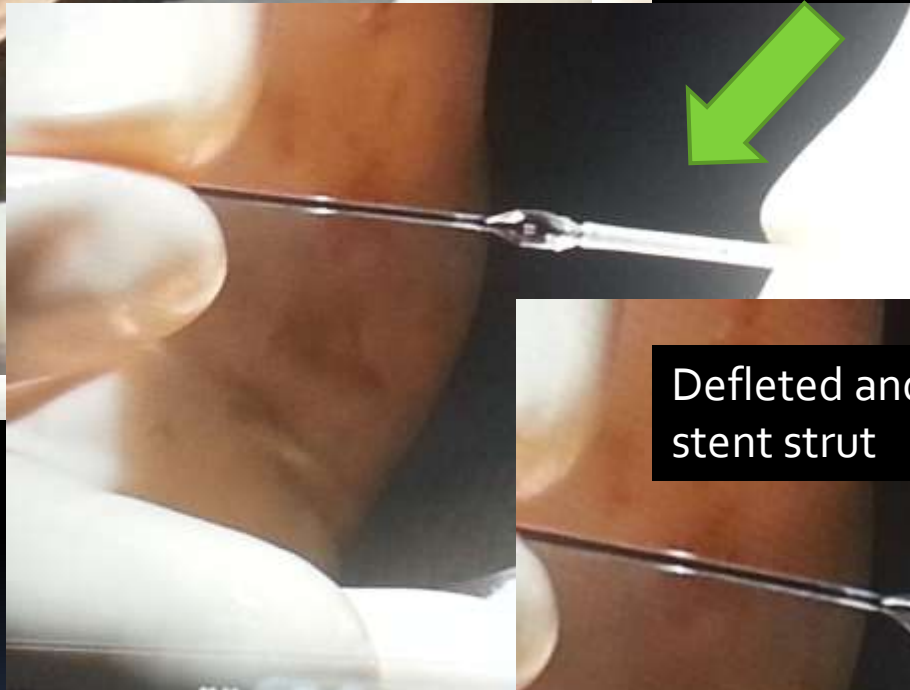
Bifurcation Lesion
classification is medina
0-1-0

Pull back the stent 2 mm from the cover stent

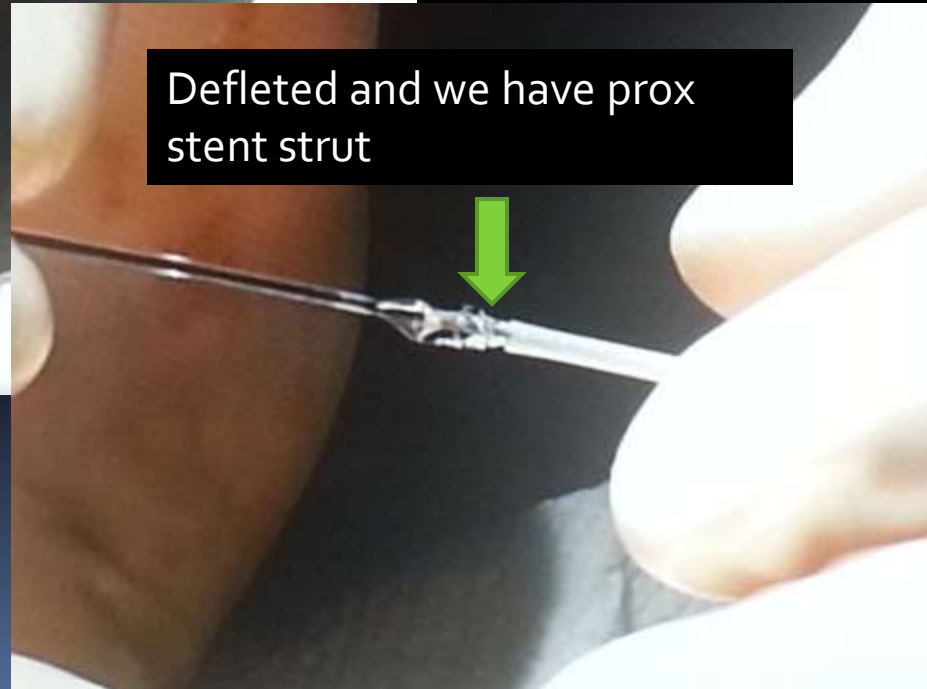
Szabo technique



Inflated prox stent strut about 2 mm length at 4 atm



Deflated and we have prox stent strut

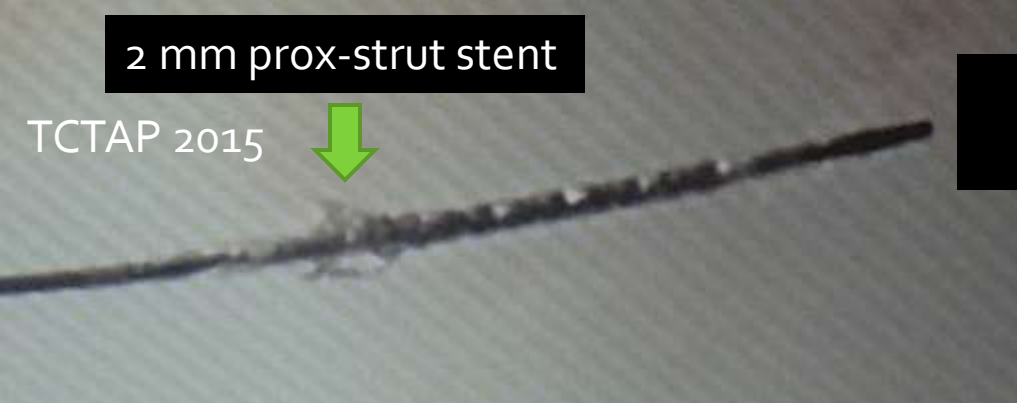


Szabo technique

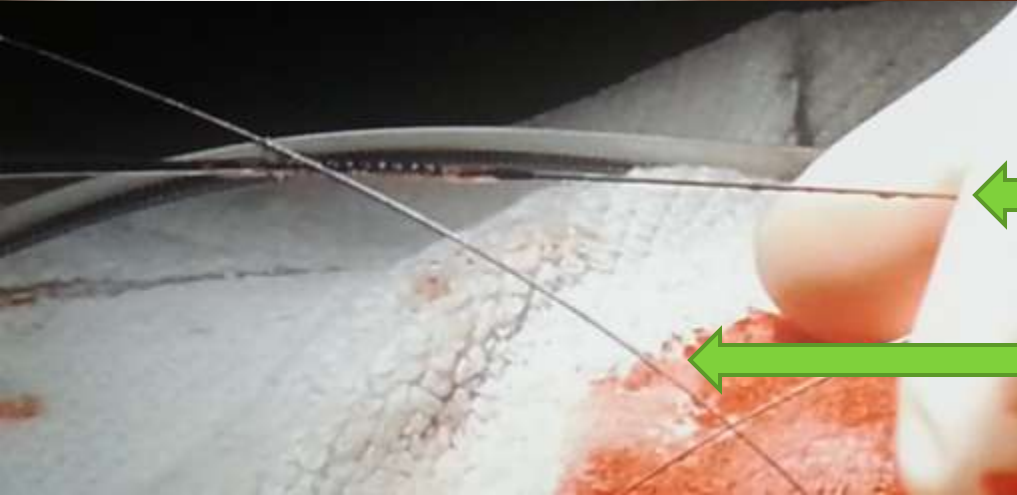


2 mm prox-strut stent

TCTAP 2015

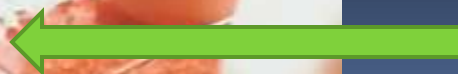


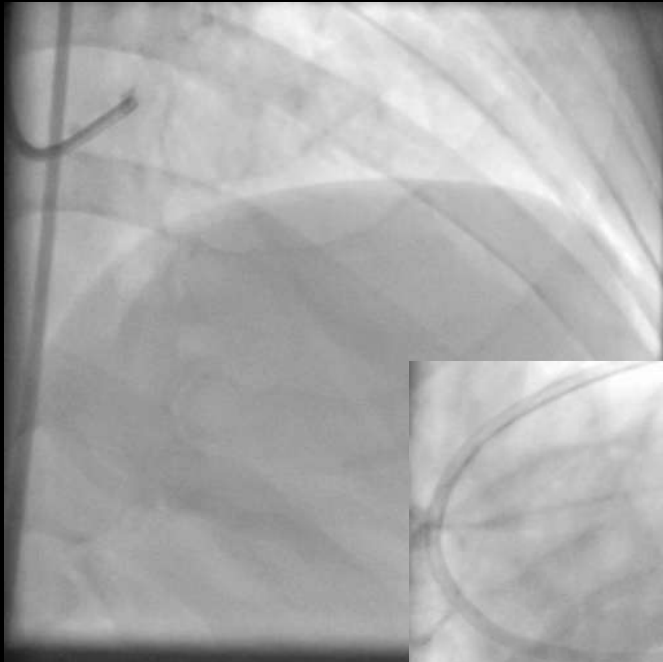
Insert stiff/distal part of side branch guide wire of LCX to the most proximal stent strut
Be careful of ballon perforation when inserted side branch wiring through most proximal stent strut.



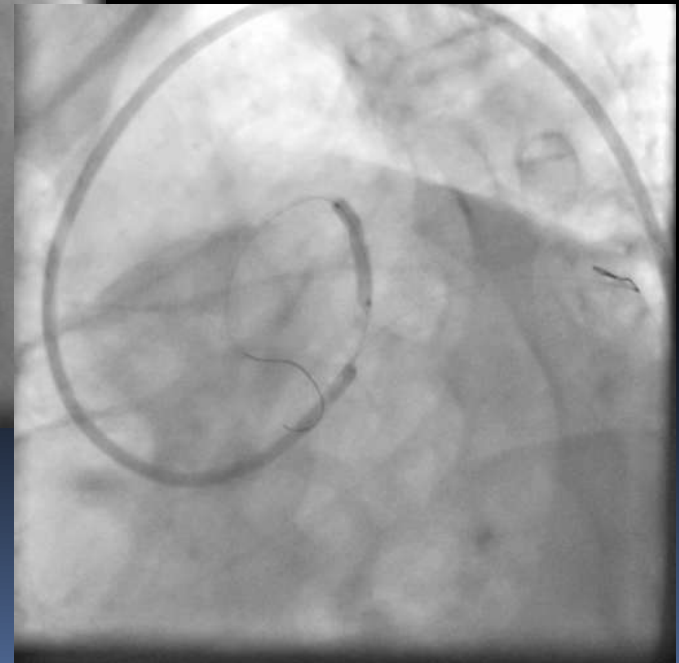
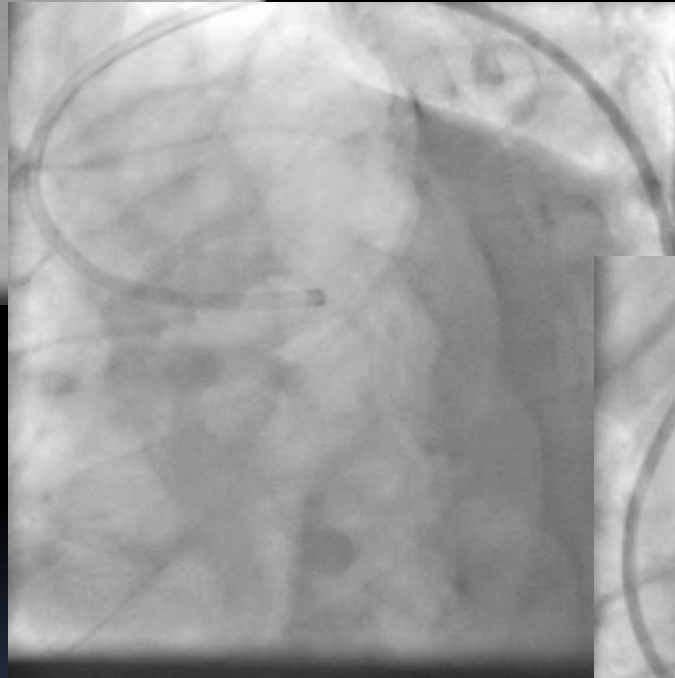
GW to LAD

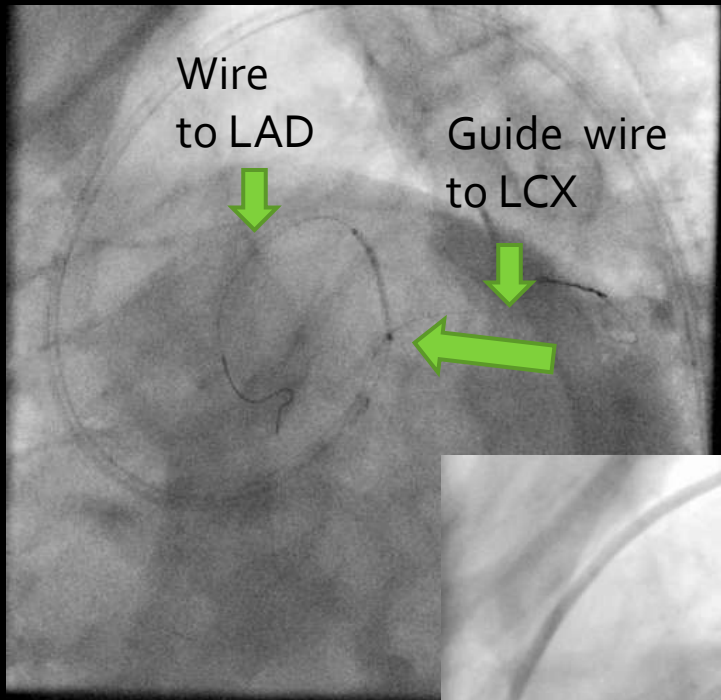
GW to LCX



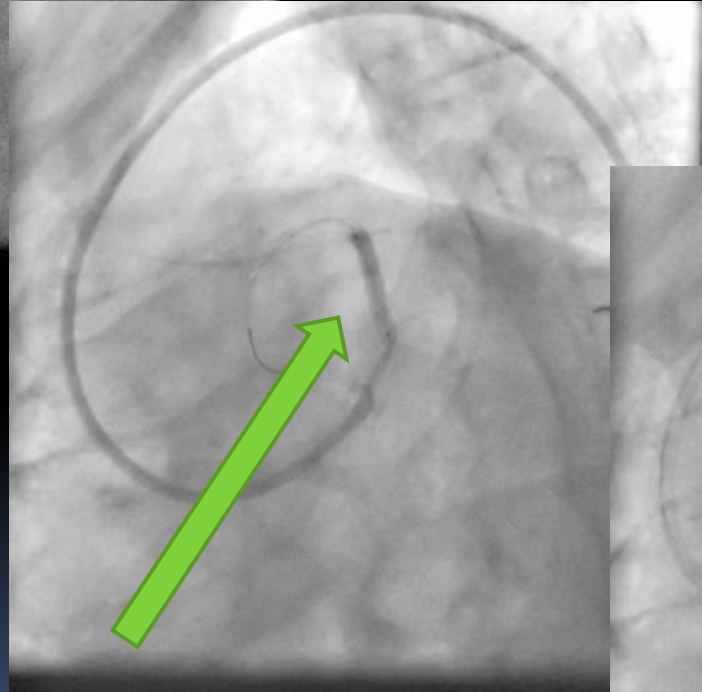


GC XB 3,5/7 F. Double wire Rinato to LAD, BMW to LCX . Predilatation ostial LAD with balloon Jive 2,0 x15 mm.

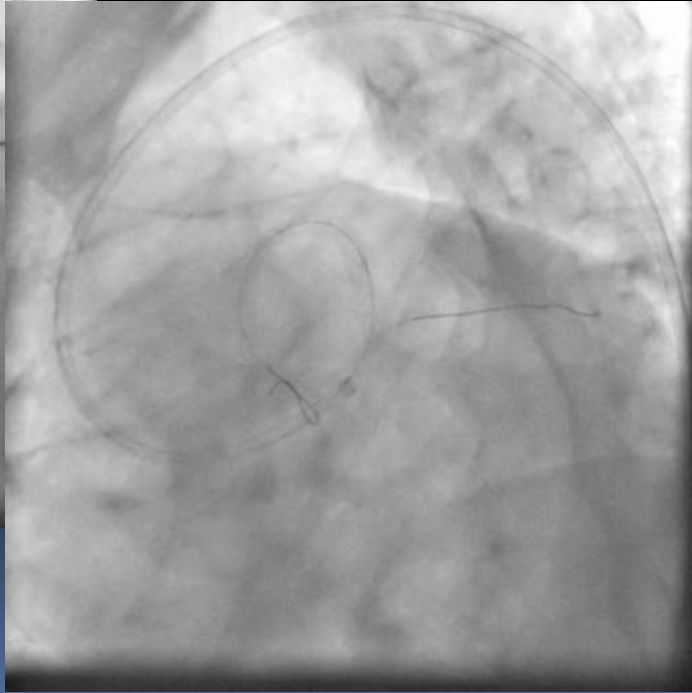




With gentle push, the stent precisely positioned at ostial LAD
(The side branch wire to LCX would hold the most prox stent strut precisely at the LAD ostium)



RESULT



Stenting Firebird 3,0x29 mm at ostial-prox LAD at 15 atm.

Discussion



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.

Discussion

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 inflation especially in calcified lesion.

TAKE HOME MESSAGES

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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