



# Ostial Lesions treated with Szabo Technique

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# BACKGROUND

- **Accurate stent deployment is not easy in ostial lesions**
- **Ostial lesions are associated with higher rate of immediate and longterm adverse cardiac events**
- **Szabo et al developed a new technique to deploy stents in aorto-ostial lesions**
- **We present our experience using the Szabo technique in all ostial lesions ( types 0,0,1 and 0,1,0 of the Medina classification )**

Stent Design and Technologies  
Exhibit Halls A and B

Wednesday, October 19, 2005, 9:00 am - 5:00 pm  
(Abstract Nos. 546-551)

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**TCT-548**

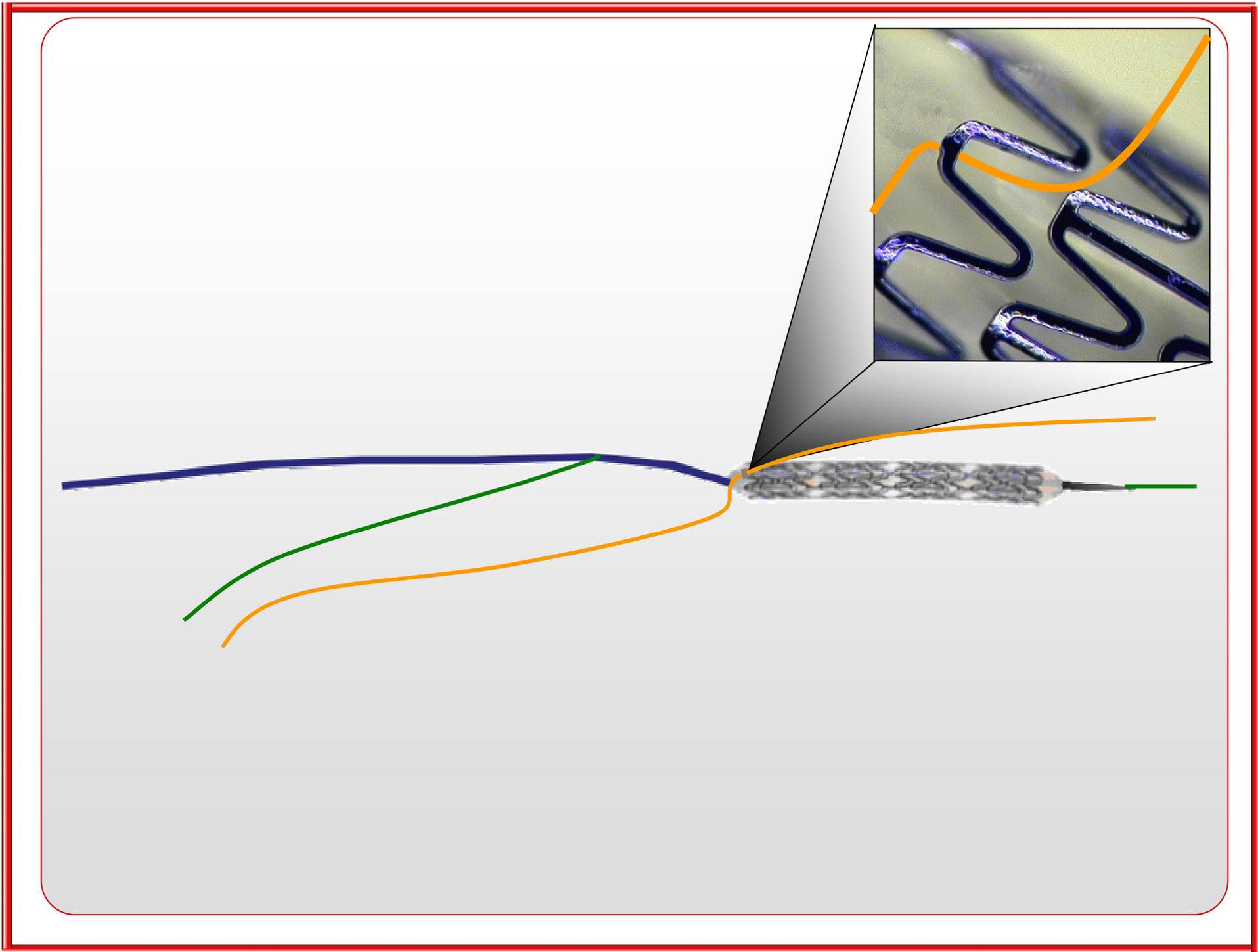
**New Technique of Aorto-Ostial Stent Placement**

*Szabolcs Szabo<sup>1</sup>, Bruce Abramowitz<sup>2</sup>, Paul T Vaitkus<sup>1</sup>*

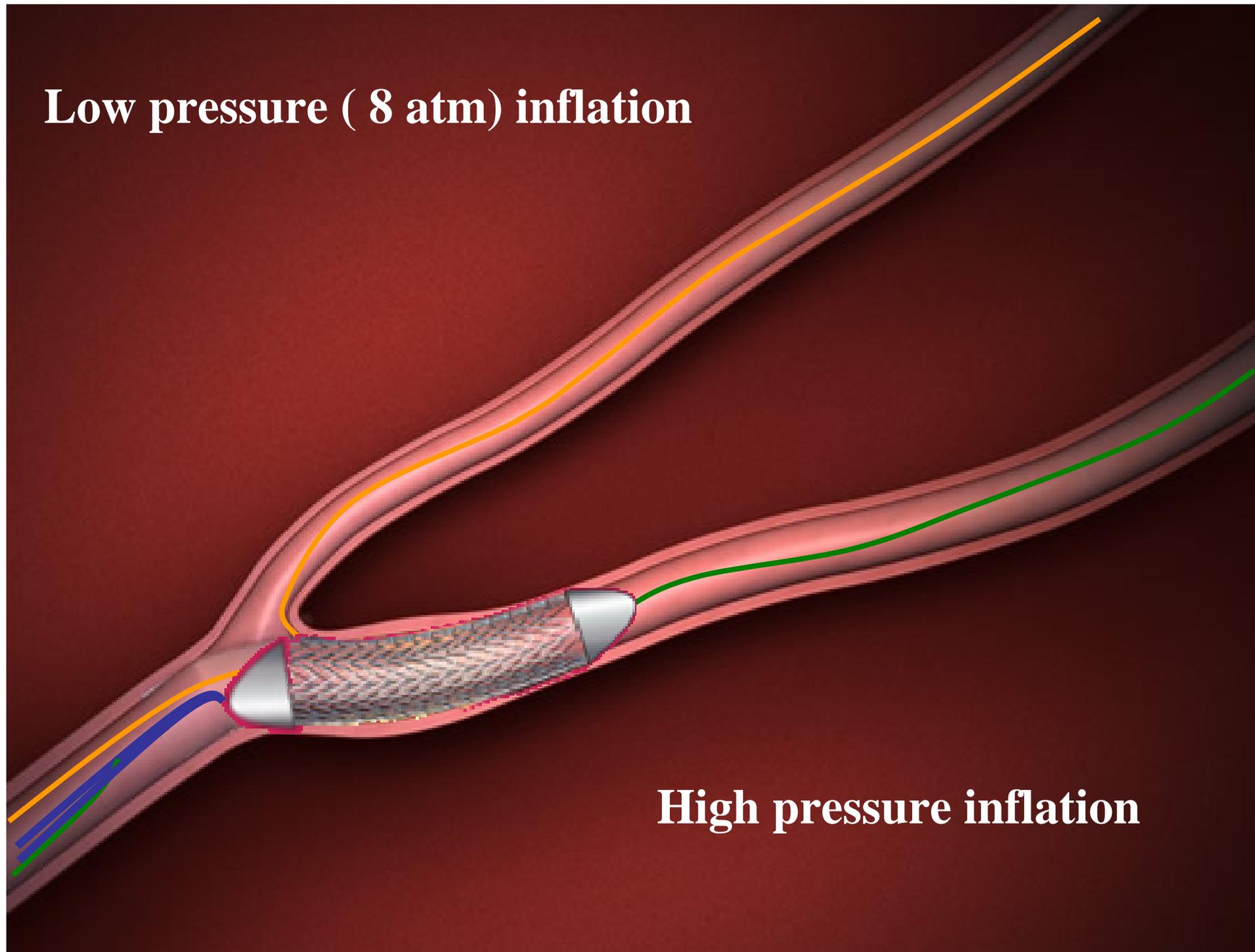
*<sup>1</sup>University of Illinois at Chicago, Chicago, IL;<sup>2</sup>Advocate Christ Medical Center, Oak Lawn, IL*

**Background:** Accurate aorto-ostial stent positioning is limited by suboptimal angiographic landmarks and guide support. We have tested a new technique using current stent technology to overcome these problems.

**Methods:** The aorto-ostial lesion is accessed with the guide catheter and wire in the usual fashion. A second guide wire is advanced approximately 2-3 cm out in the aorta. The stent is loaded on the first wire in the usual fashion. The second, accessory wire is back-loaded through the last proximal strut of the stent.



**Low pressure ( 8 atm) inflation**



**High pressure inflation**

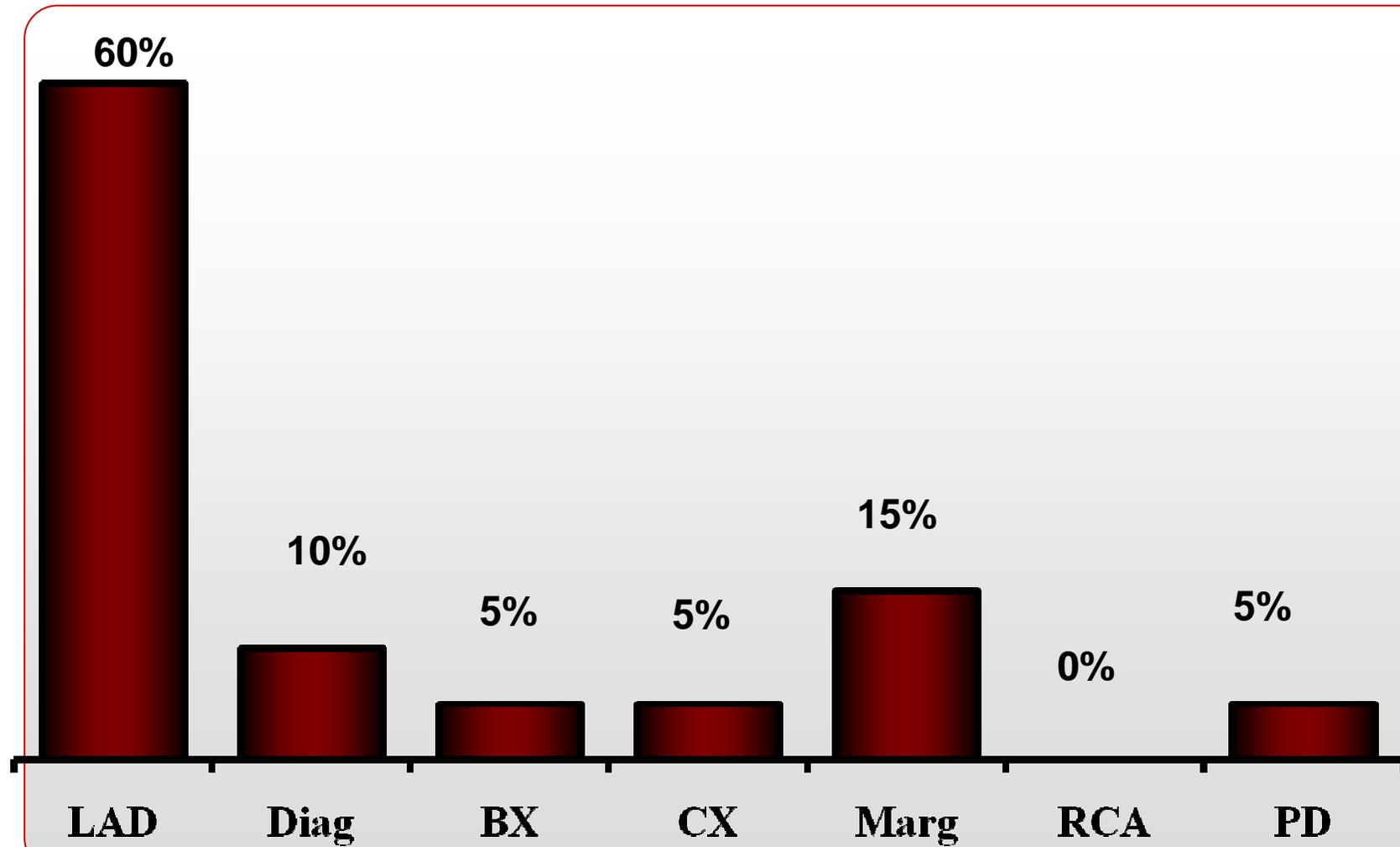
# Baseline Characteristics (N=28)

<b>Age (yr)</b>	<b>68±13</b>
<b>Male (n)</b>	<b>22 (80%)</b>
<b>Hypertension (n)</b>	<b>19 (70%)</b>
<b>Diabetes mellitus (n)</b>	<b>8 (30%)</b>
<b>High Cholesterol(n)</b>	<b>15 (55%)</b>
<b>Smoker (n)</b>	<b>18 (65%)</b>
<b>LVEF (%)</b>	<b>44,6±11,2</b>

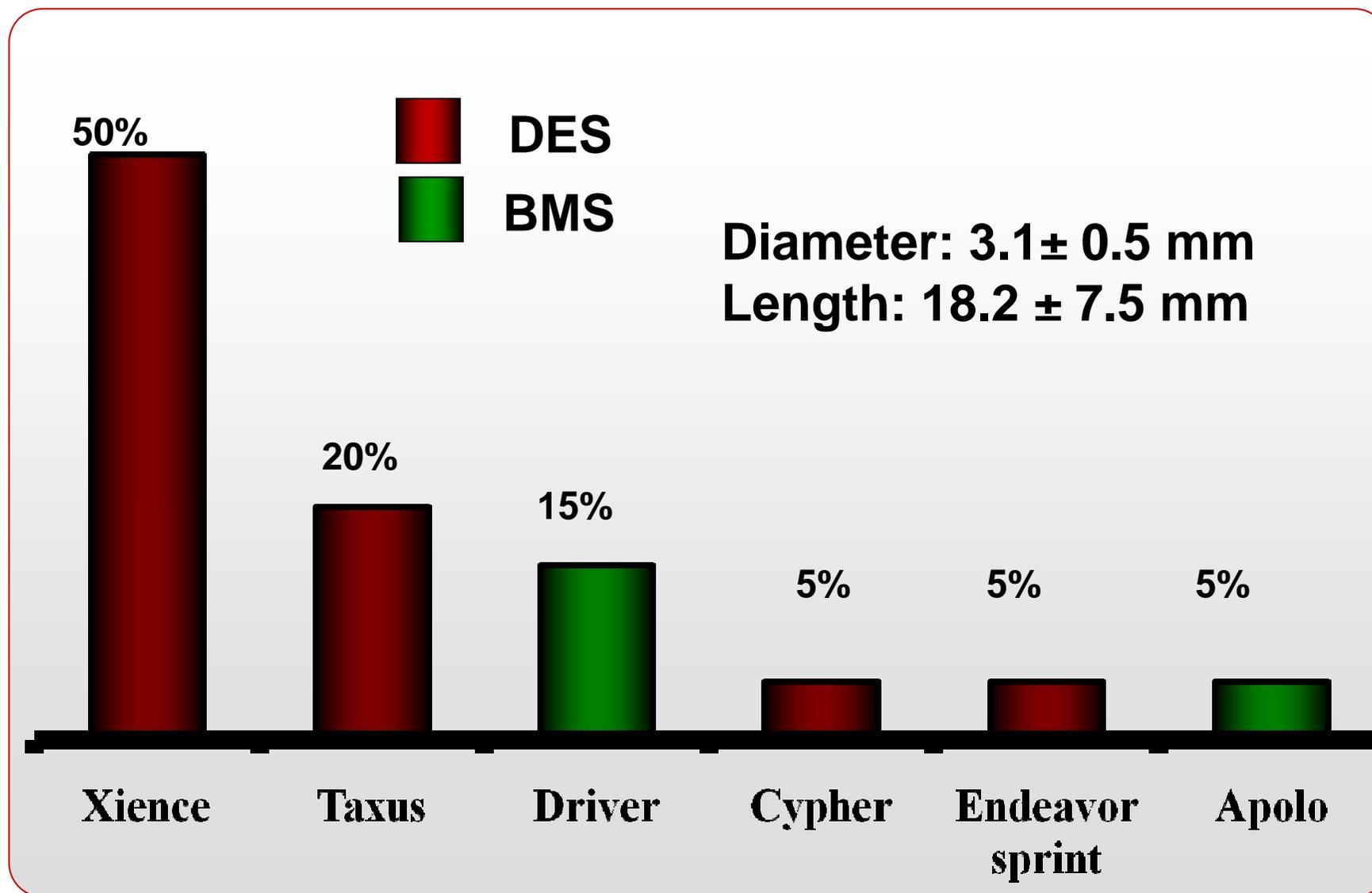
# Procedural Characteristics ( N = 28 )

<b>Balloon predilatation</b>	<b>14 (50%)</b>
<b>Cutting balloon</b>	<b>8 (30%)</b>
<b>Rotational atherectomy</b>	<b>5 (16%)</b>
<b>Thrombectomy</b>	<b>1 (4%)</b>
<b>GP IIb/IIIa</b>	<b>8 (30%)</b>
<b>IVUS pre y post</b>	<b>14 (50%)</b>

# Vessel Distribution



# Stent Type

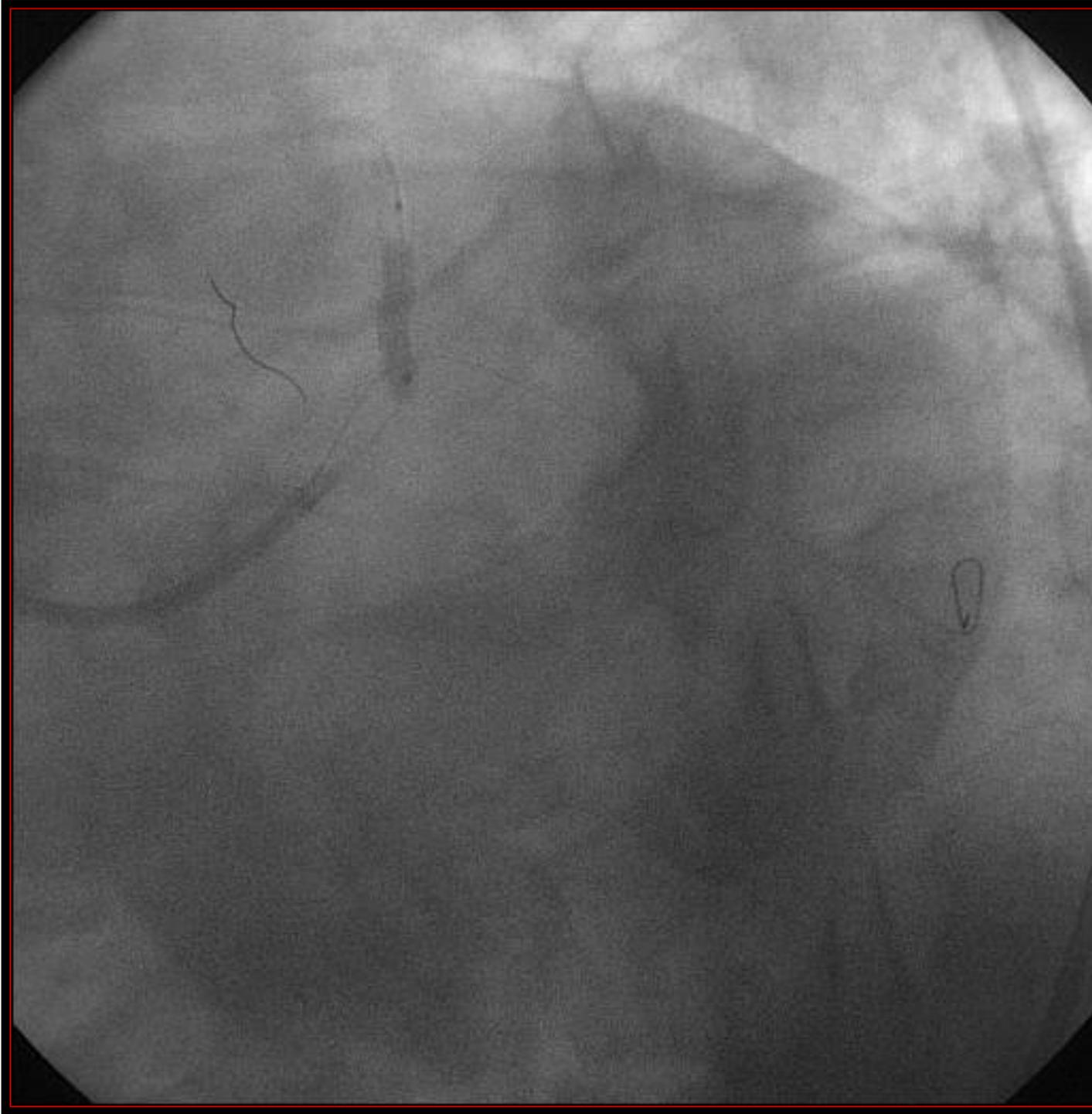


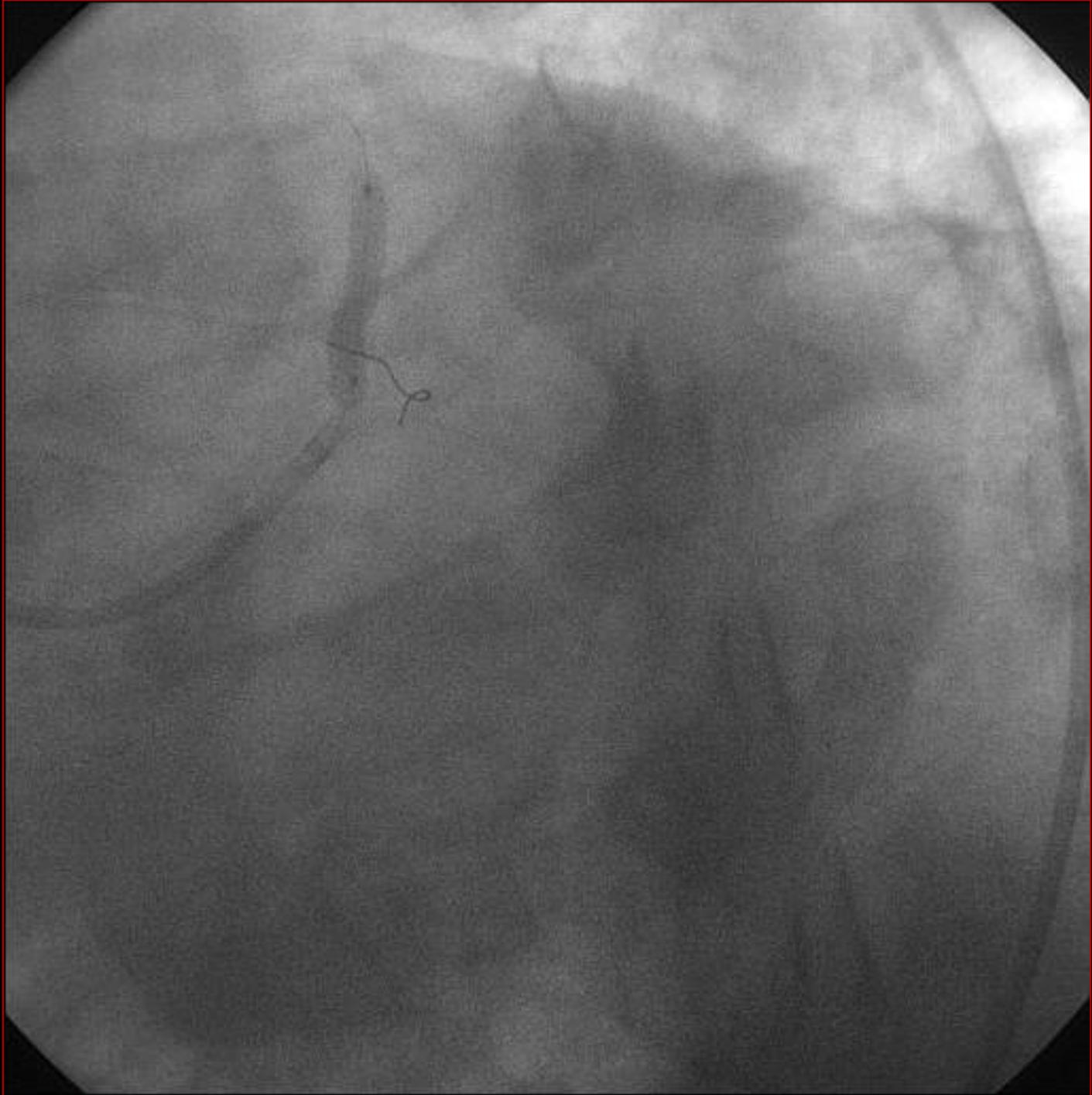
# Clinical History

- **Seventy year old male referred from referral hospital for LAD PCI**
- **Risk factors : Hypertension, DM,**
- **Admitted to the referral hospital for NSTEMI**
- **Coronary angiogram : Severe calcified ostial-diffuse lesion LAD**

# Technique

- **Guiding catheter : EBU 3.5 7 Fr.**
- **Rotational Atherectomy with 1.5 and 1.75 mm burr**
- **BMW wires in LAD and Cx**





## **TECHNIQUE ( Tips and Tricks )**

- **Good predilatation of the ostial lesion**
- **Avoid wire crossing ( permanent identification of each wire )**
- **Avoid balloon pinching ( load the wire carefully )**
- **If wire crossing, retrieve wire A ( main vessel ) to the guiding catheter and advance it again**

# Clinical Results ( $245 \pm 112$ days)

**Procedural success**                      **28 (100%)**

**Clinical success**                        **28 (100%)**

**Death**                                        **0**

**TLR**                                         **1**

**Stent thrombosis**                        **1**

# Conclusions

- **Szabo technique is useful to accurately deploy stents in ostial lesions**
- **It is especially indicated when you want to avoid stent implantation in a vessel located proximal to the ostial lesion**