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## USO DE SOFTWARES E TÉCNICAS DE REALCE ANGIOGRÁFICO

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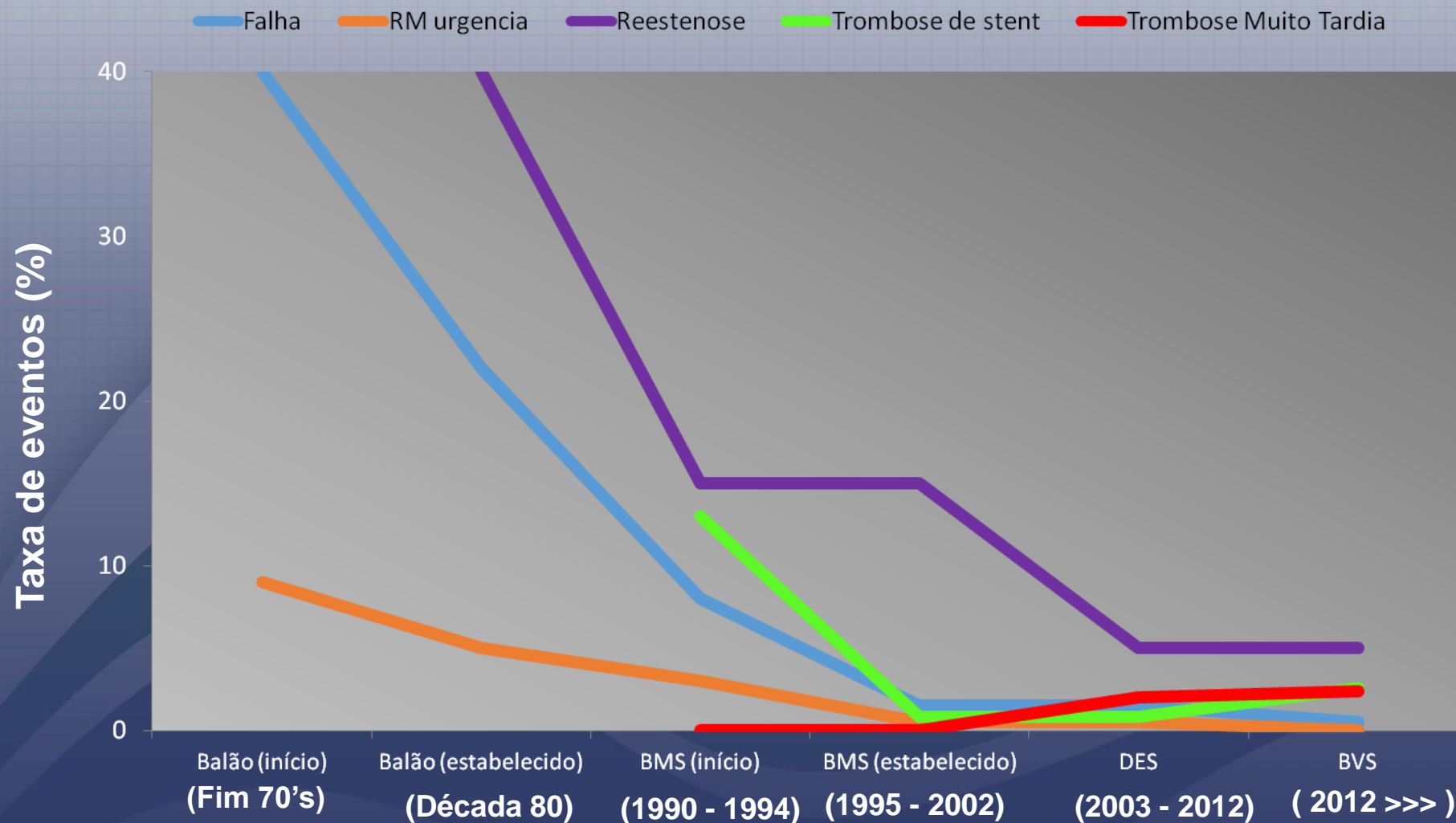
## *USO DE SOFTWARES E TÉCNICAS DE REALCE ANGIOGRÁFICO*

- Conflitos de interesse:
- Nenhum

# EVOLUÇÃO DA INTERVENÇÃO CORONÁRIA



\*Adaptado Painel FDA meeting 2006 – Baim DS

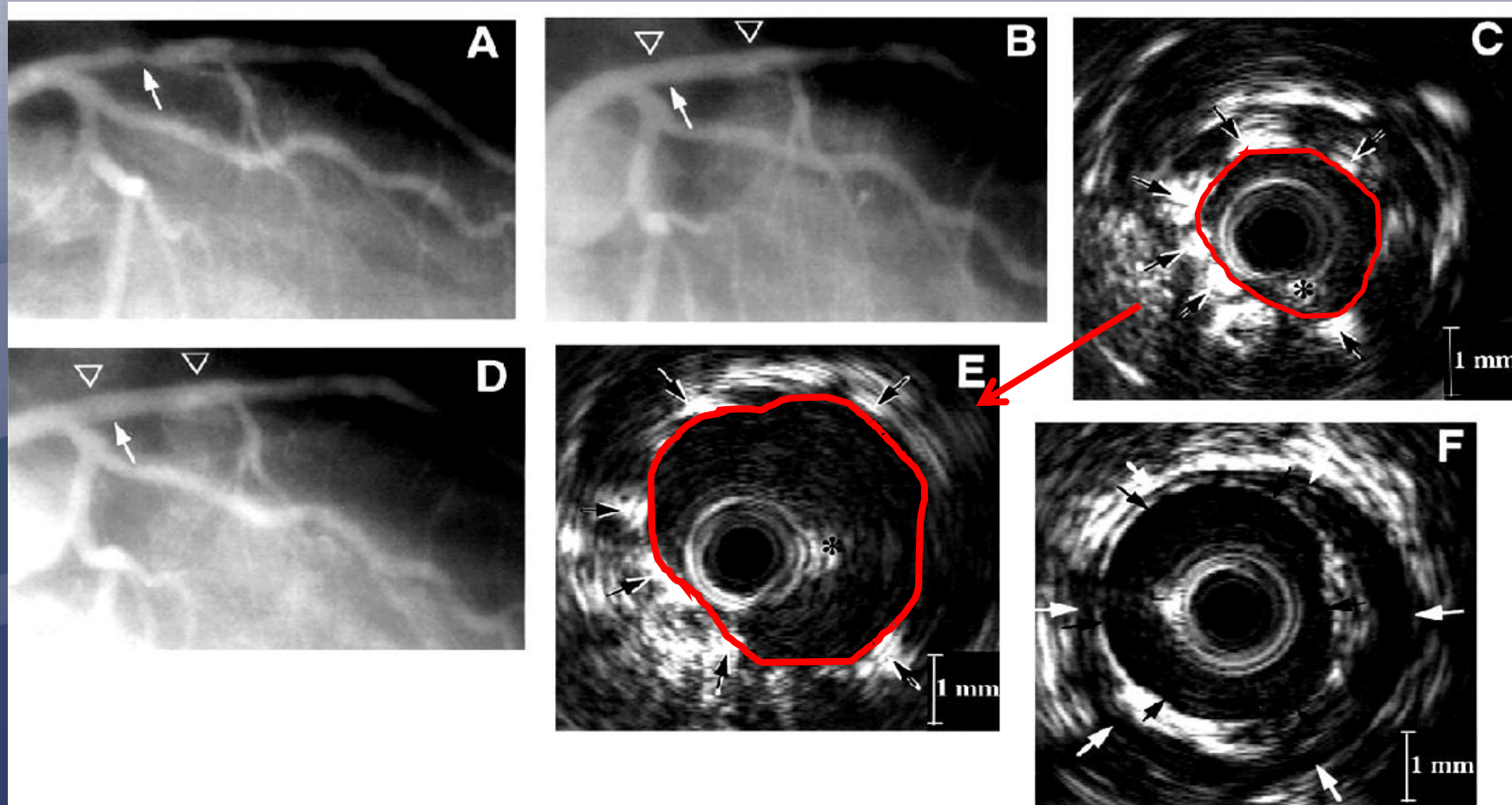




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# Intracoronary Stenting Without Anticoagulation Accomplished With Intravascular Ultrasound Guidance

Antonio Colombo, MD; Patrick Hall, MD; Shigeru Nakamura, MD; Yaron Almagor, MD; Luigi Maiello, MD; Giovanni Martini, CCP; Antonio Gaglione, MD; Steven L. Goldberg, MD; Jonathan M. Tobis, MD




# LIÇÕES QUE O USIC NOS ENSINOU

- Stent subexpandido é causa de trombose e reestenose
- Stent mal aposto é causa de trombose (aguda; subaguda e tardia);
- Lesões significantes proximal ou distal ao segmento tratado são preditores de reestenose;
- Trauma de borda de stent predispõe à dissecação de borda que é um preditor de risco para trombose, especialmente nos SF, e reestenose também;
- Posicionamento inadequado, má aposição e subexpansão dos stents são mais frequentes quando utilizando múltiplos stents e em bifurcação.
- Expansão adequada do stent é mais difícil de ser atingida em lesões longas, assimétricas e calcificadas;



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## *Uso de softwares e técnicas de realce angiográfico*

### ❖ Limitações do USIC

- ✓ Disponibilidade de equipamento
- ✓ Equipe treinada
- ✓ Curva de aprendizado
- ✓ Necessidade de introdução de mais um dispositivo no leito coronário
  - ✓ Maior tempo de execução
  - ✓ Maior risco de complicações
- ✓ Aumento de custo

\*Estaria indicado para todos os casos?

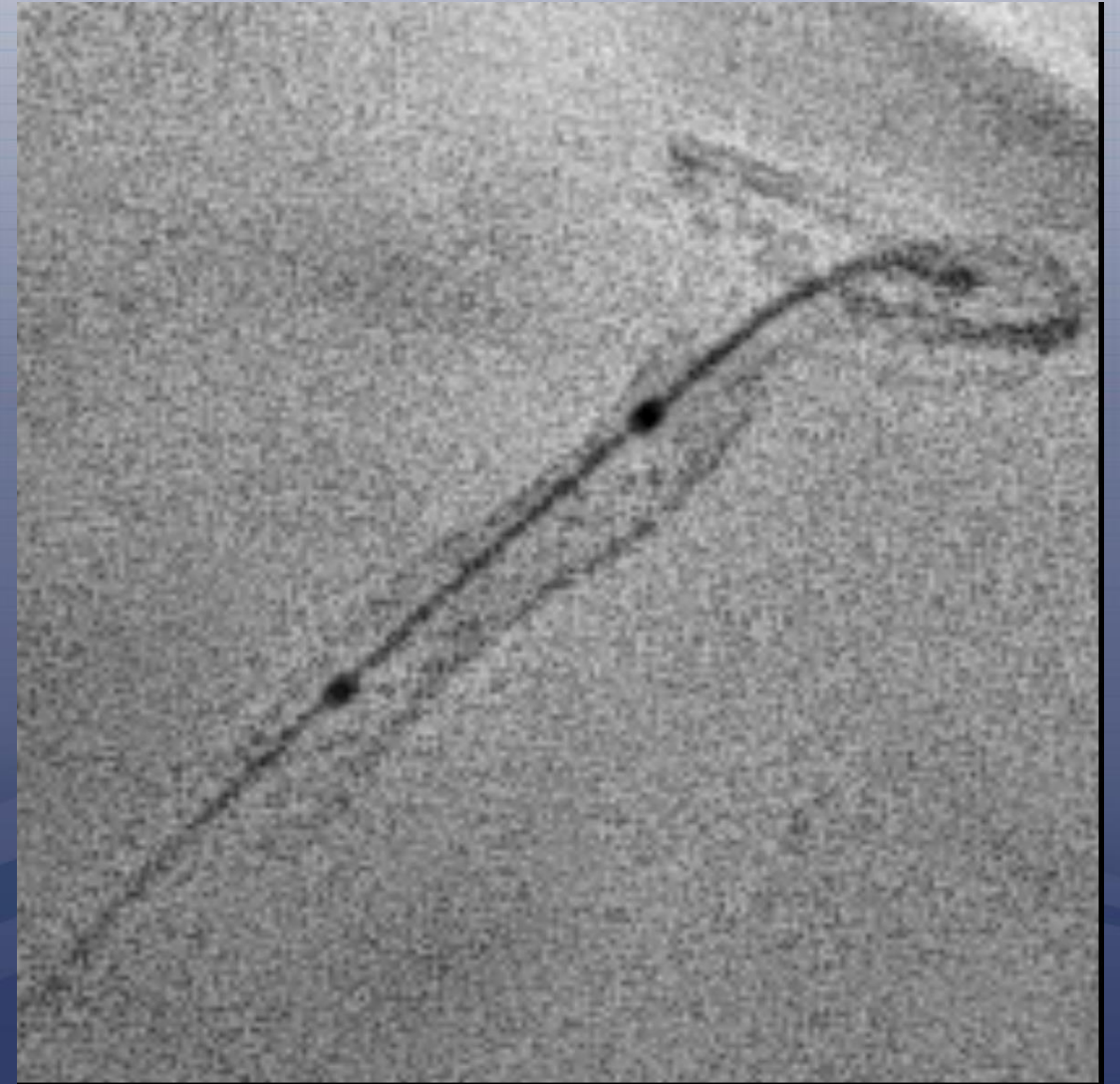


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## *Uso de softwares e técnicas de realce angiográfico*

- Técnicas de realce angiográfico
  - StentBoost
  - Stentviz
  - IC stent
  - Clearstent (Clearstent live)

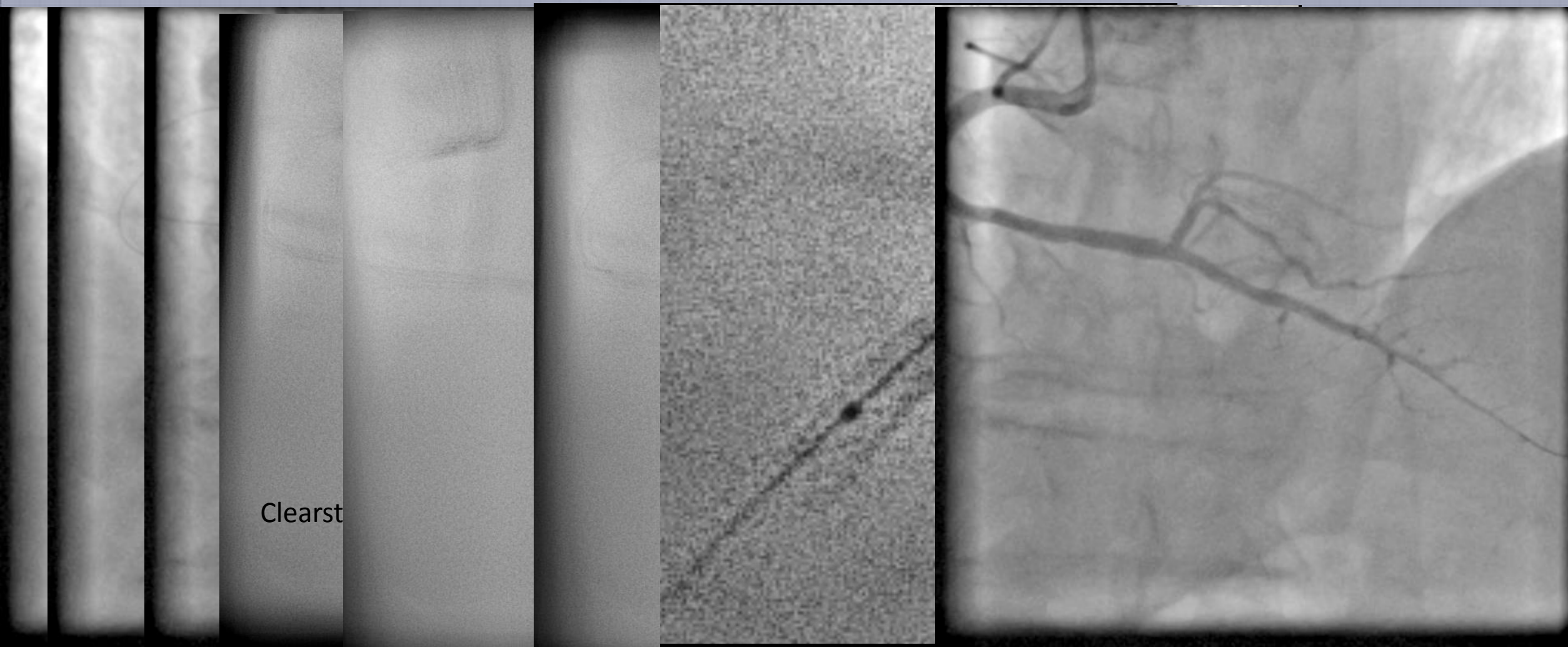




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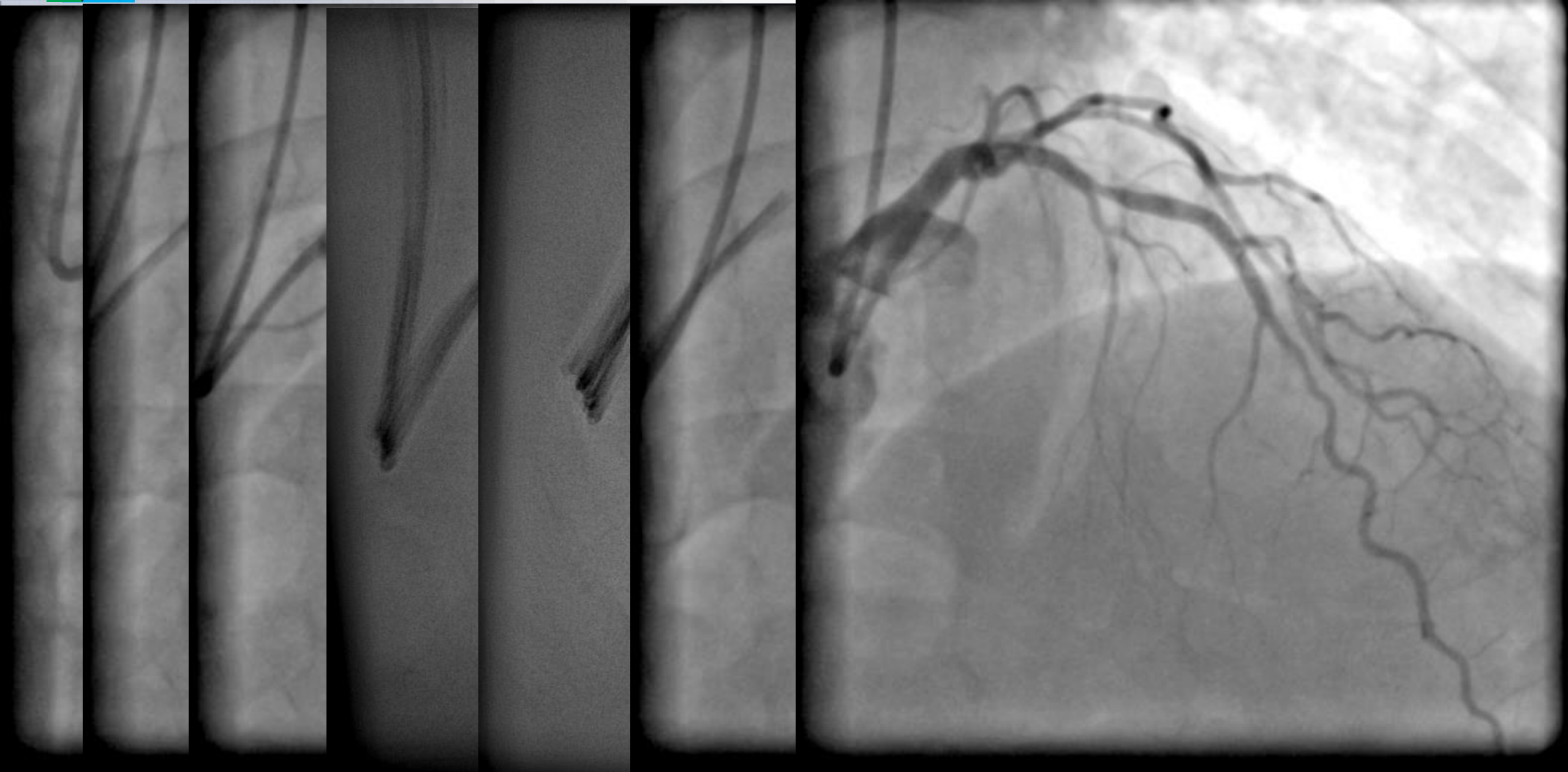
*Caso 1 – Mulher; 78a; IMC = 30; ClCr = 48m/min; A. Instável*





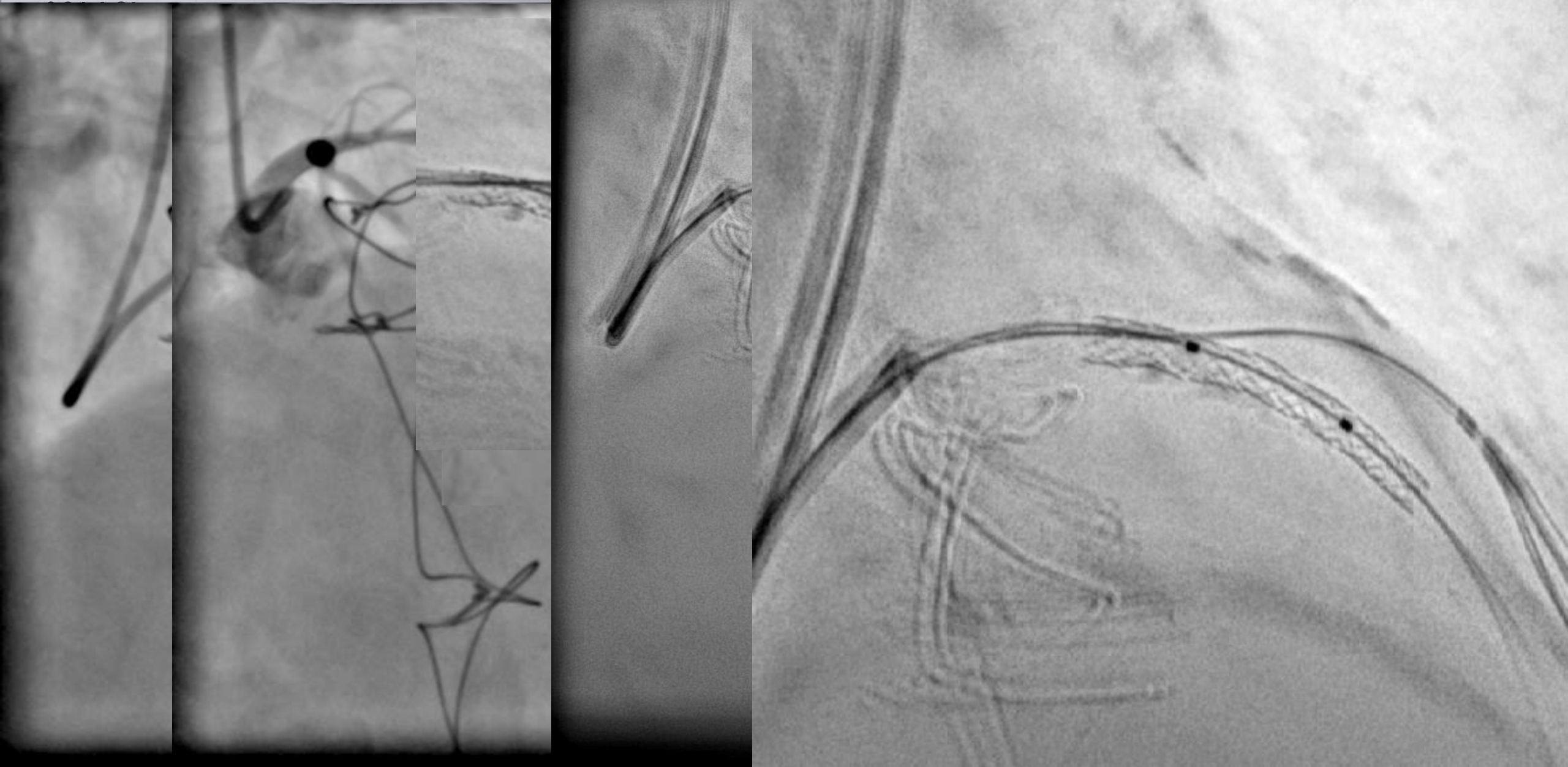


*Caso 2 – Homem, 67a, AE com cintilografia + anterior,*






### *Caso 3 – Lesão longa e calcificada na ADA*

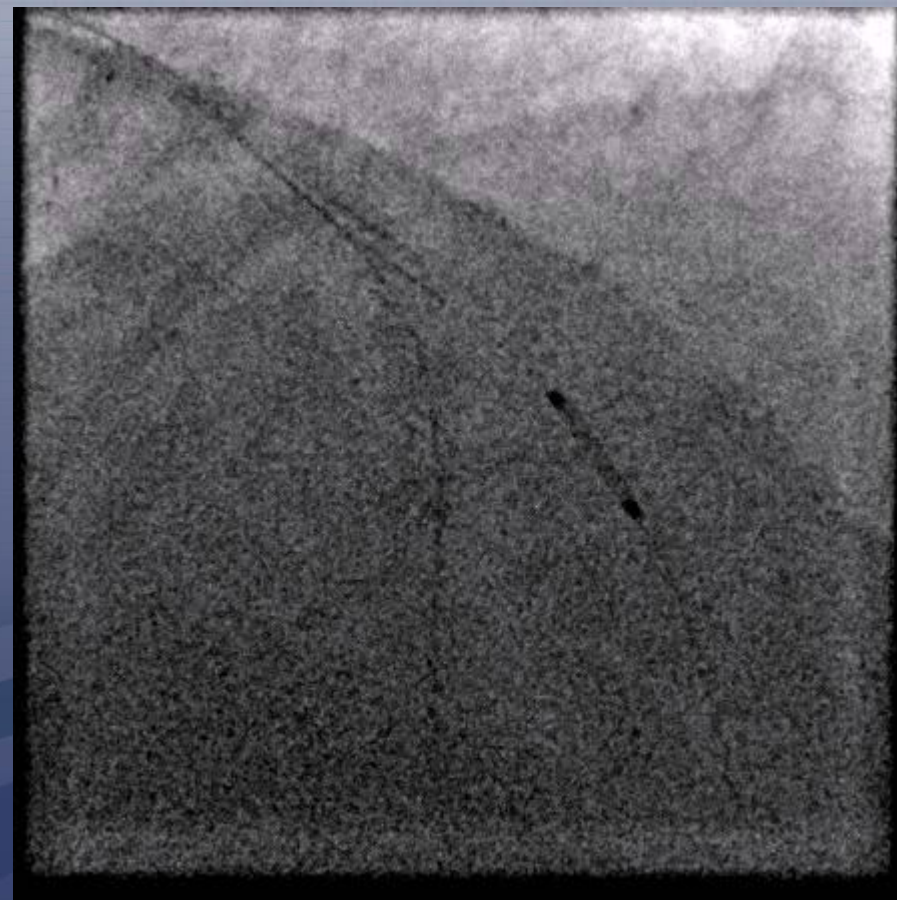




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# CLEARstent LIVE

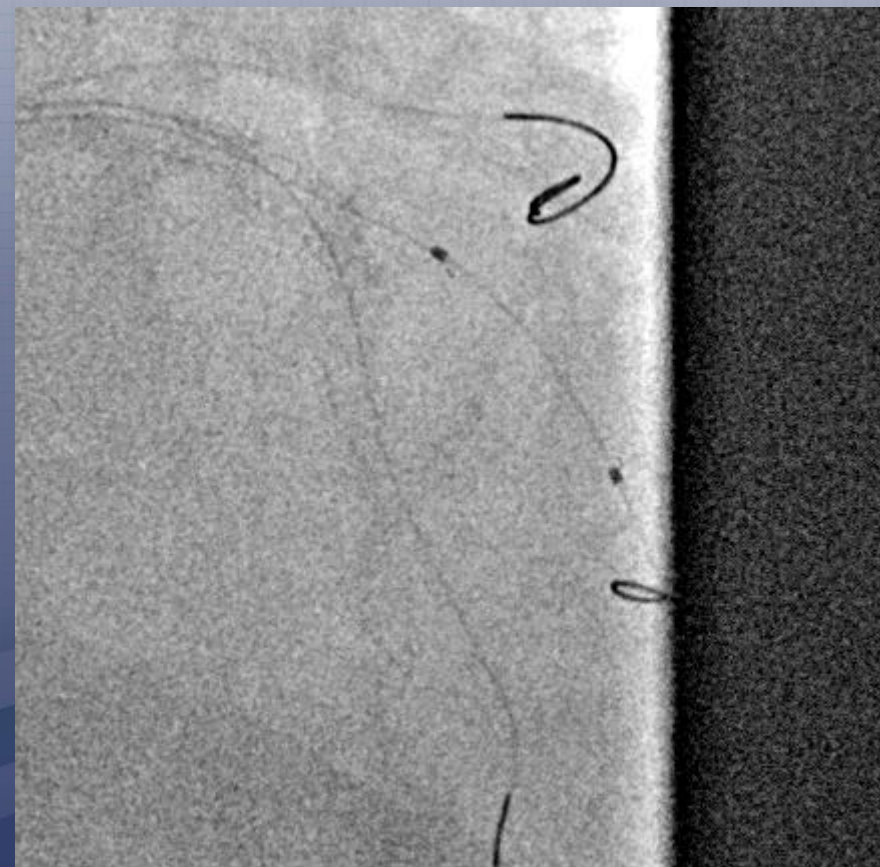




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# *CLEARstent Live – Implante de Stents bioabsorvíveis*

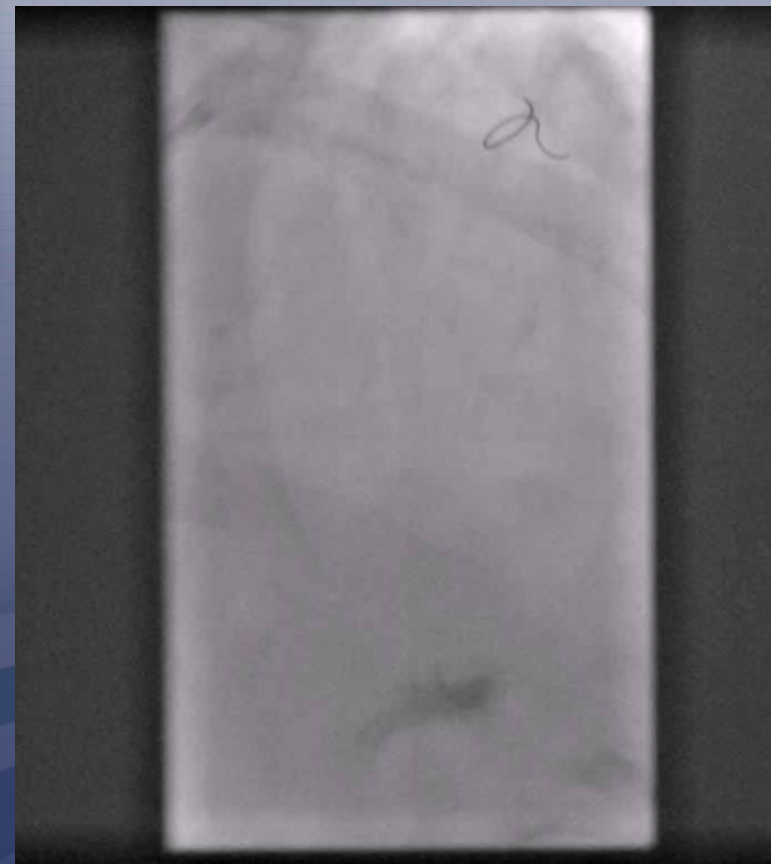
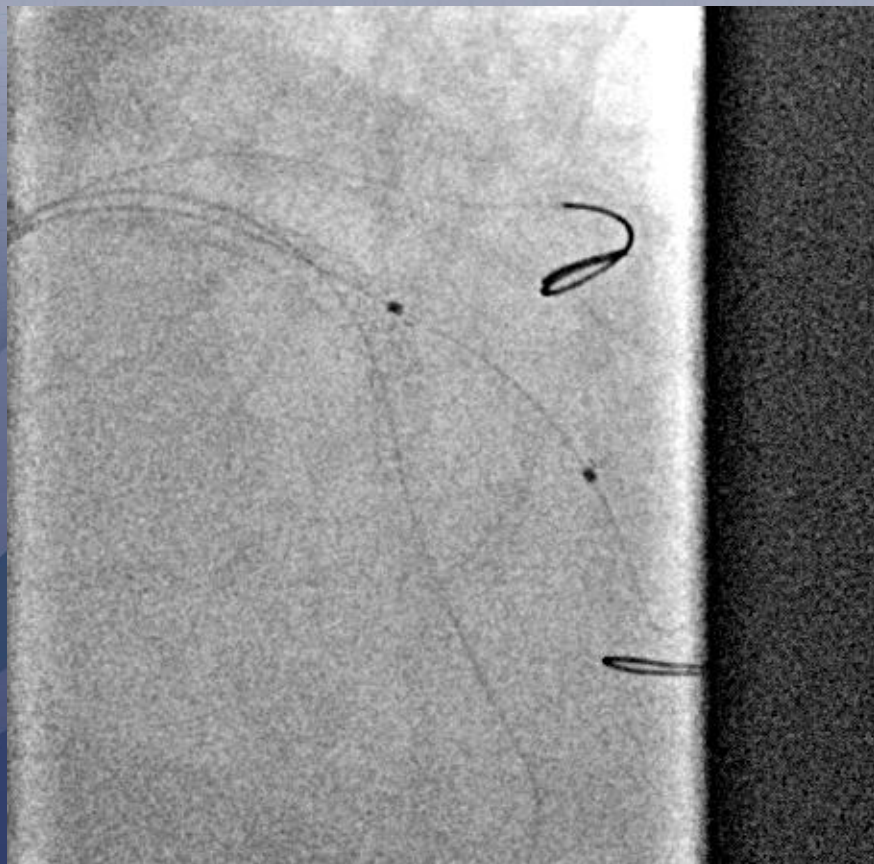




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## *CLEARstent Live – Implante de Stents bioabsorvíveis*





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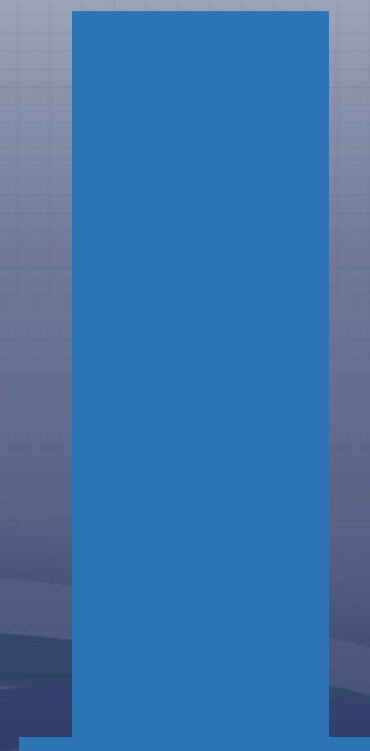
# Exposição Radiológica



Fluoroscopy



CLEARstent Live

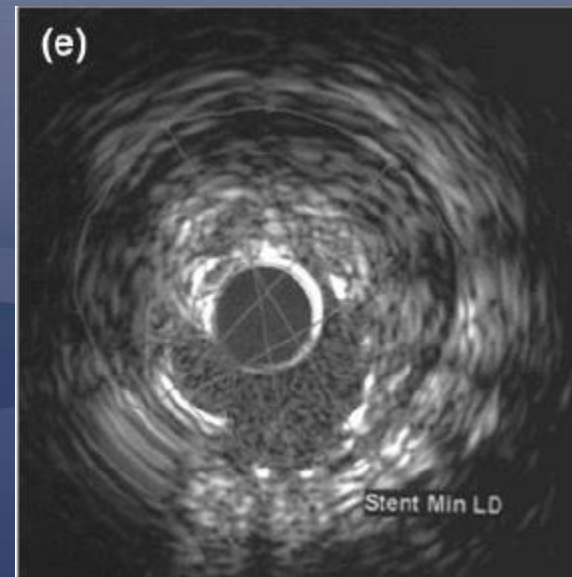
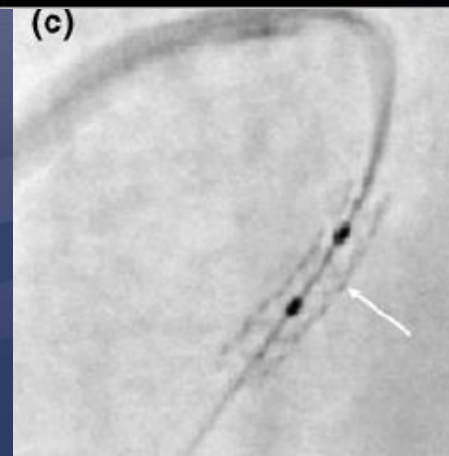
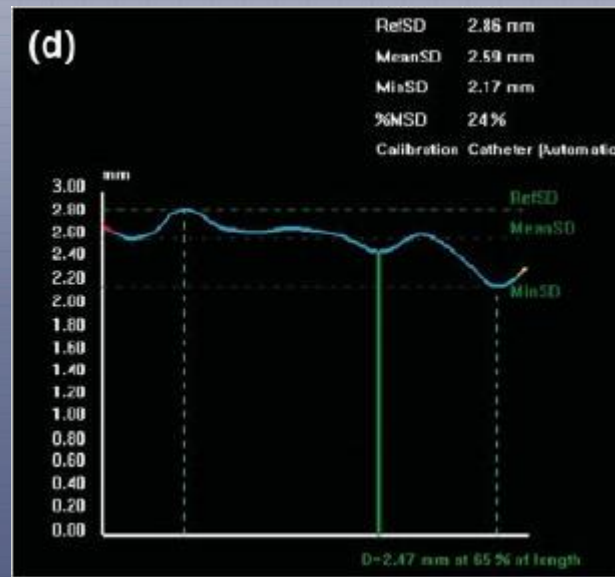
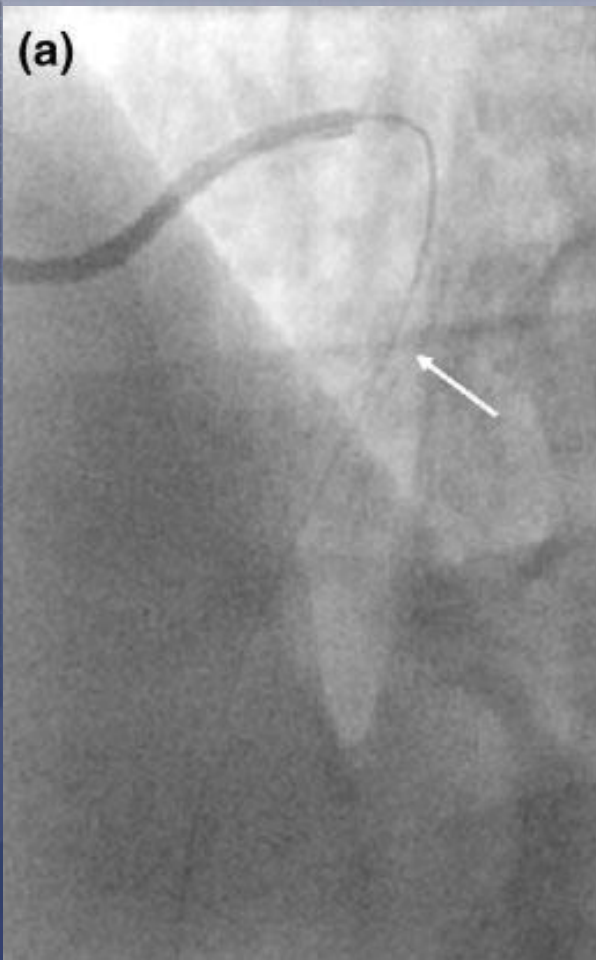


Acquisition



# Determination of Adequate Coronary Stent Expansion Using StentBoost, a Novel Fluoroscopic Image Processing Technique

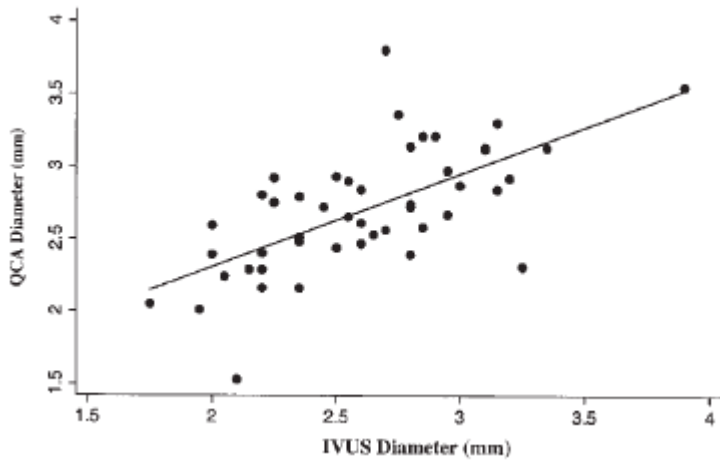
Jacob M. Mishell,<sup>1</sup> MD, Kalpesh T. Vakharia,<sup>1</sup> MD, Thomas A. Ports,<sup>1</sup> MD, Yerem Yeghiazarians,<sup>1</sup> MD, and Andrew D. Michaels,<sup>2\*</sup> MD, MAS



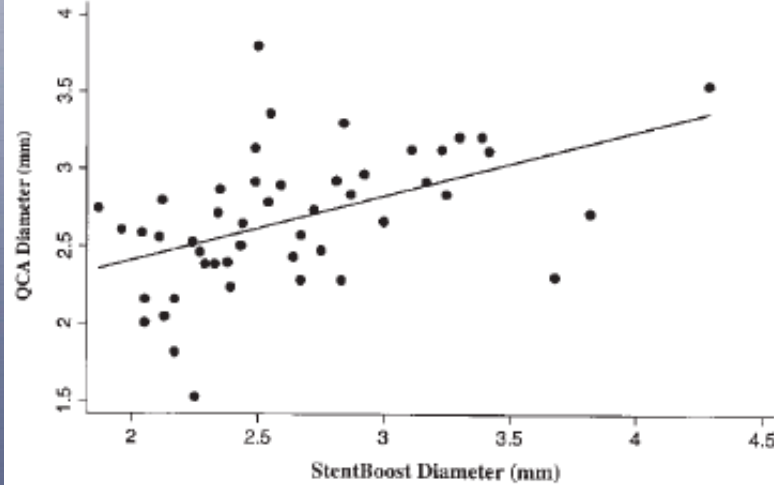


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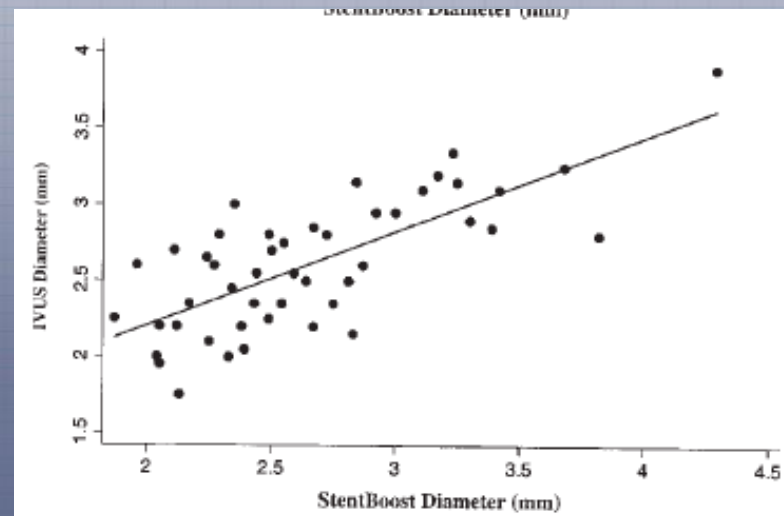
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N = 47; r = 0,65; P < 0,0001



N = 48; r = 0,49; P < 0,0004



N = 47; r = 0,75; P < 0,0001

**Conclusions: SB had superior correlations for stent expansion measured by IVUS when compared with QCA. A minimum stent diameter by SB measurement <2.5 mm is associated with inadequate stent expansion using IVUS criteria.**





Heart Vessels (2013) 28:1–6  
DOI 10.1007/s00380-011-0202-9

ORIGINAL ARTICLE

## Assessment of optimum stent deployment by stent boost imaging: comparison with intravascular ultrasound

Nobuhiro Tanaka · Nico H. J. Pijls · Jacques J. Koolen · Kees-Joost Botman · Herman R. Michels · Bart R. G. Brueren · Kathinka Peels · Naohisa Shindo · Jun Yamashita · Akira Yamashina

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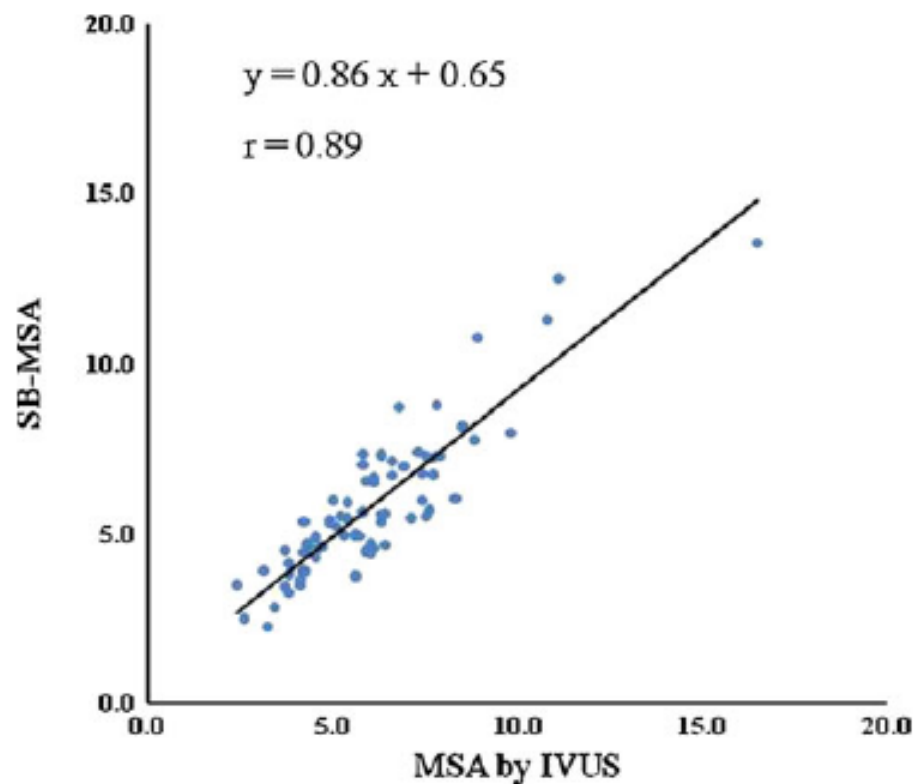
### Conclusions

Although the sensitivity of SB image for adequate stent deployment is low, the specificity is sufficiently high for it to be the first-line for monitoring just after stent implantation in centers where IVUS is not used routinely.

**Table 5** Correlations of the judgments of the stent results (60 patients, 68 vessels, 72 observations)

	IVUS	
	Adequate	Inadequate
Stent boost imaging		
Adequate	51	14
Inadequate	0	7

IVUS Intravascular ultrasound





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