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USO DE SOFTWARES E TÉCNICAS DE REALCE ANGIOGRÁFICO

Silvio Gioppato

Coordenador do serviço de cardiologia invasiva – Hospital Vera Cruz; Campinas – SP

Coordenador do serviço de cardiologia invasiva – Hospital São Vicente de Paulo; Jundiaí– SP

Membro da equipe de cardiologia invasiva – Hospital de clínicas da UNICAMP; Campinas - SP





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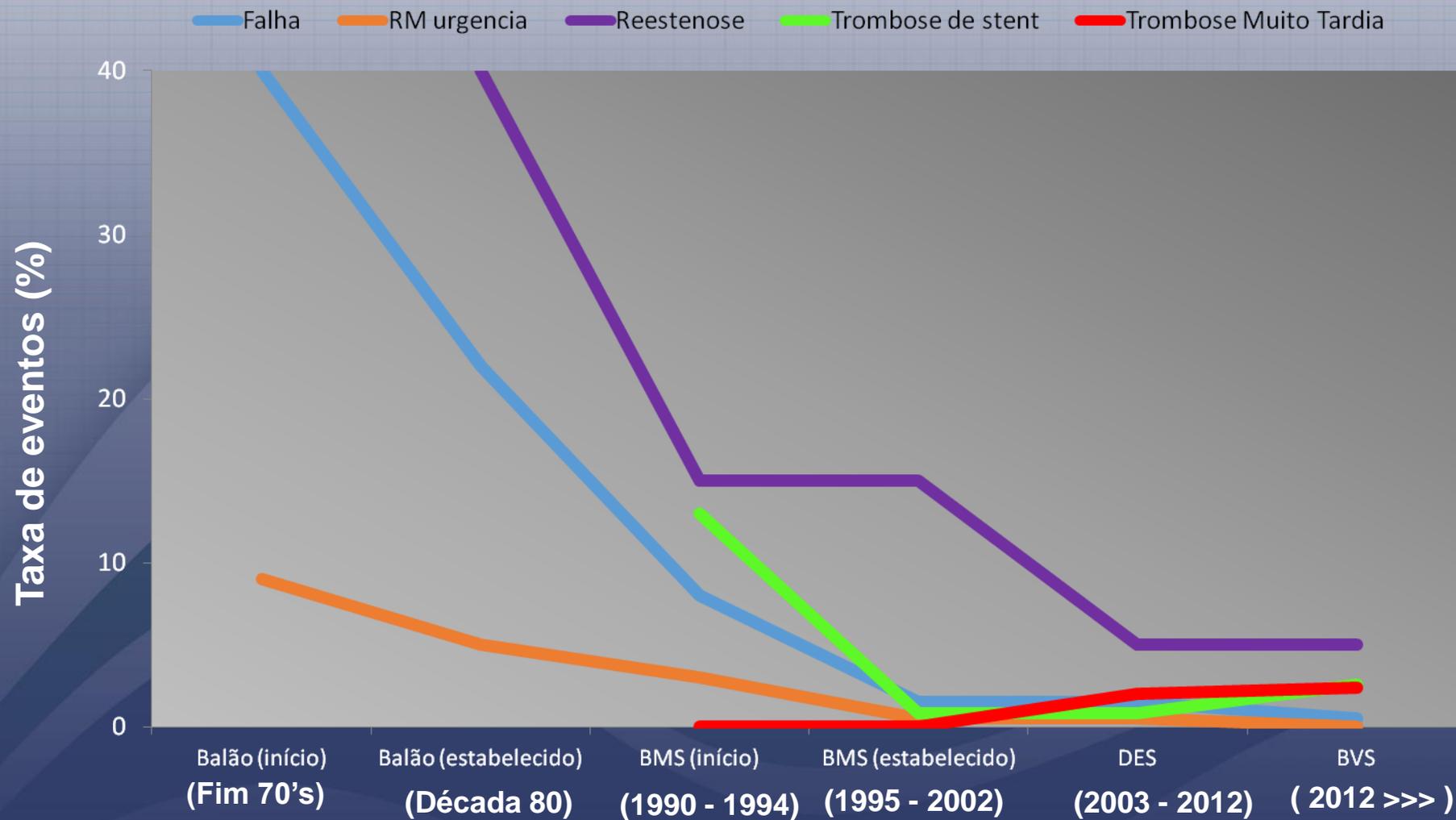
USO DE SOFTWARES E TÉCNICAS DE REALCE ANGIOGRÁFICO

- Conflitos de interesse:
- Nenhum

EVOLUÇÃO DA INTERVENÇÃO CORONÁRIA



*Adaptado Painel FDA meeting 2006 – Baim DS

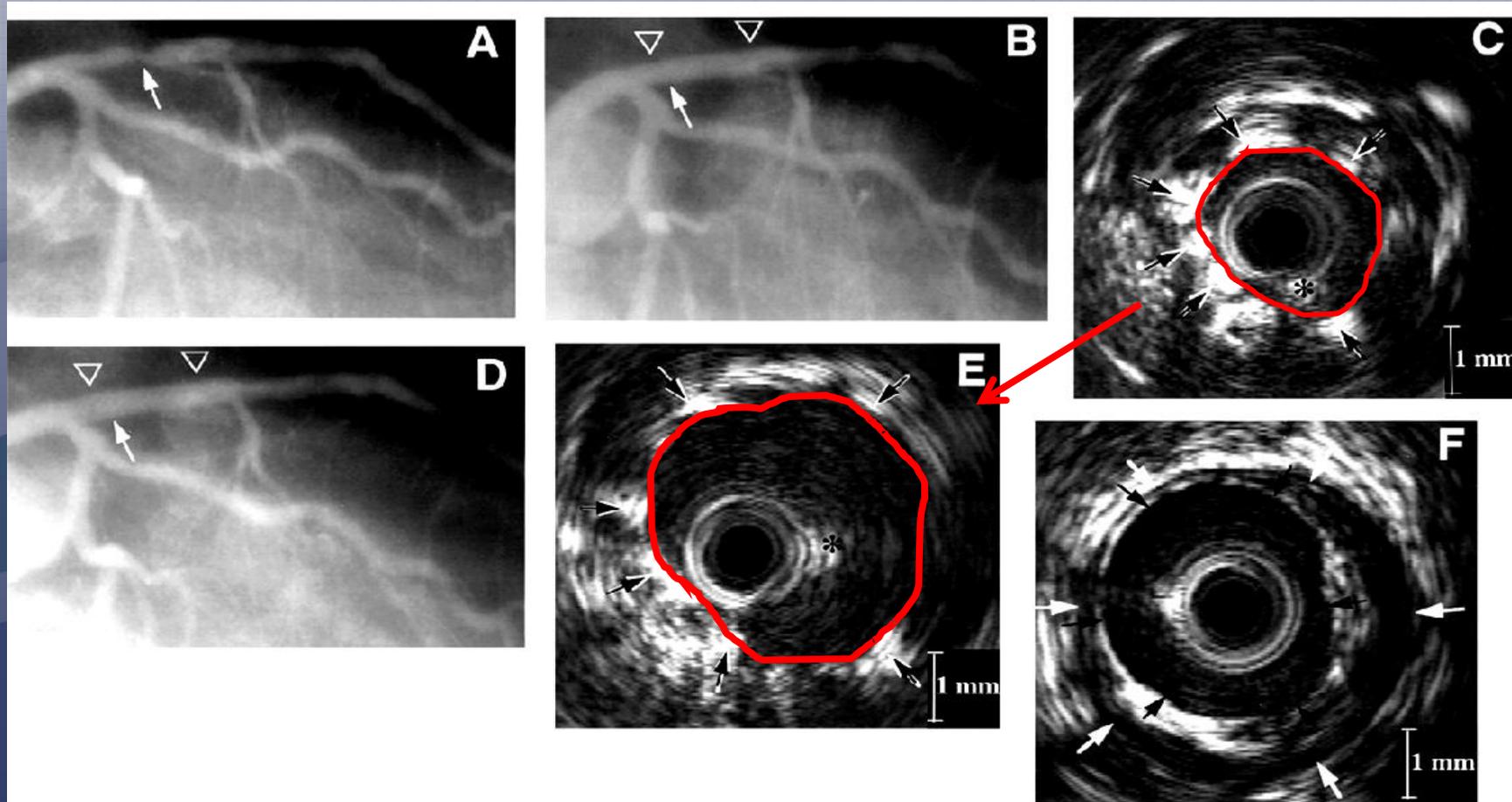




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Intracoronary Stenting Without Anticoagulation Accomplished With Intravascular Ultrasound Guidance

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

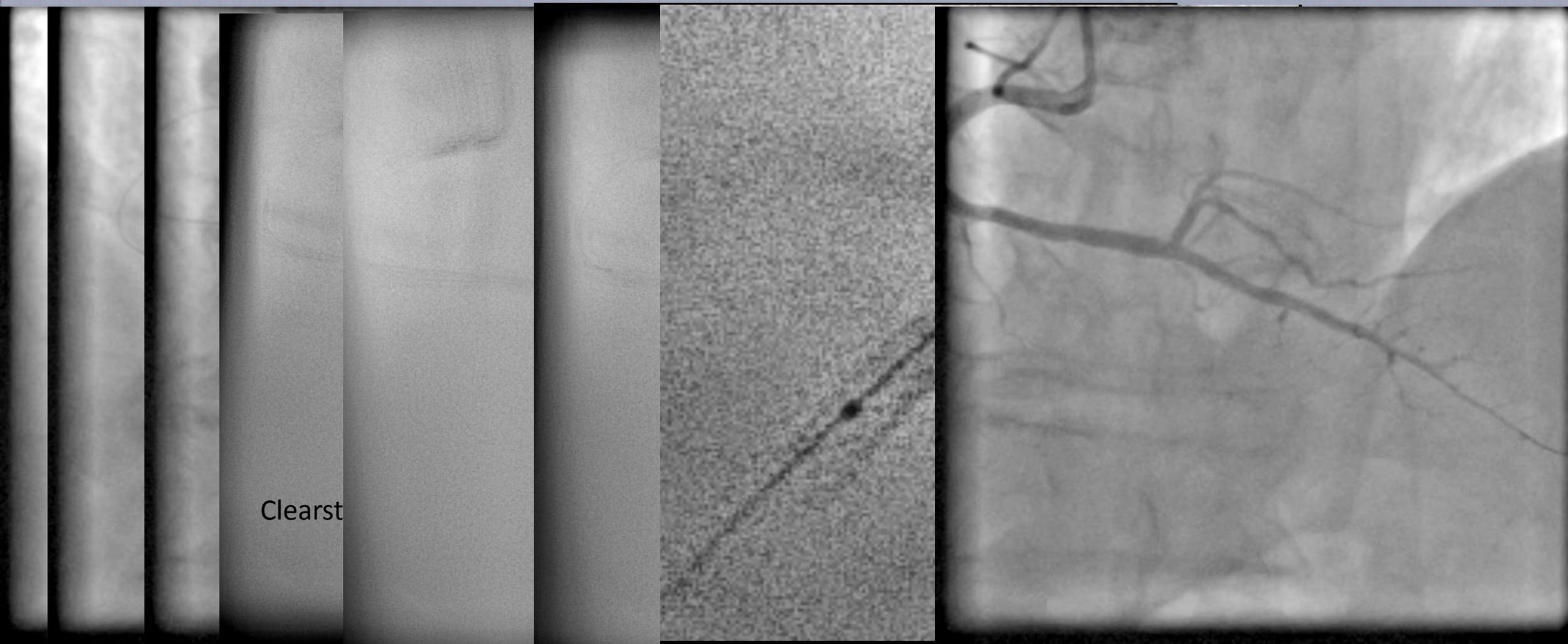




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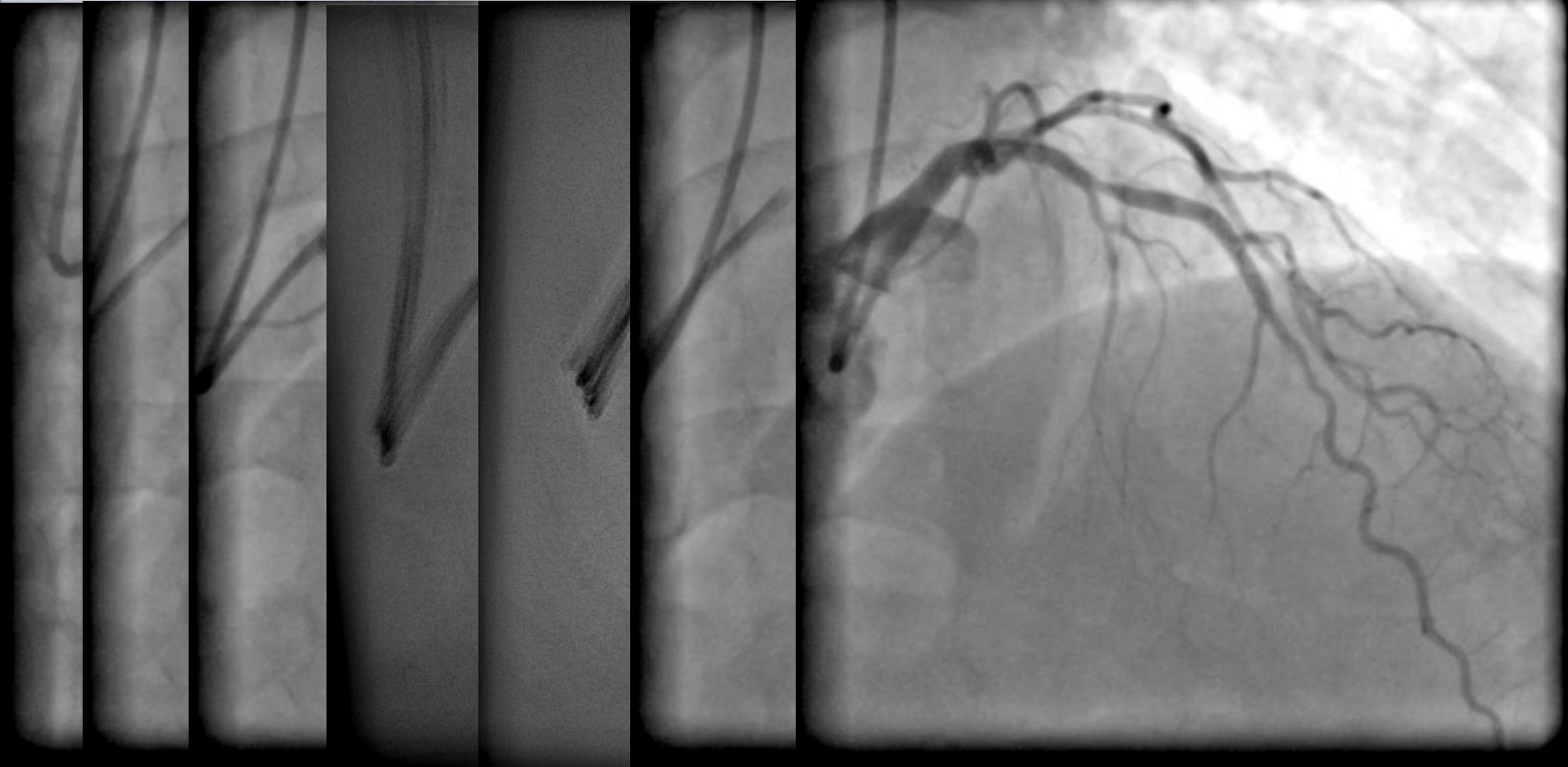
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Caso 1 – Mulher; 78a; IMC = 30; ClCr = 48m/min; A. Instável



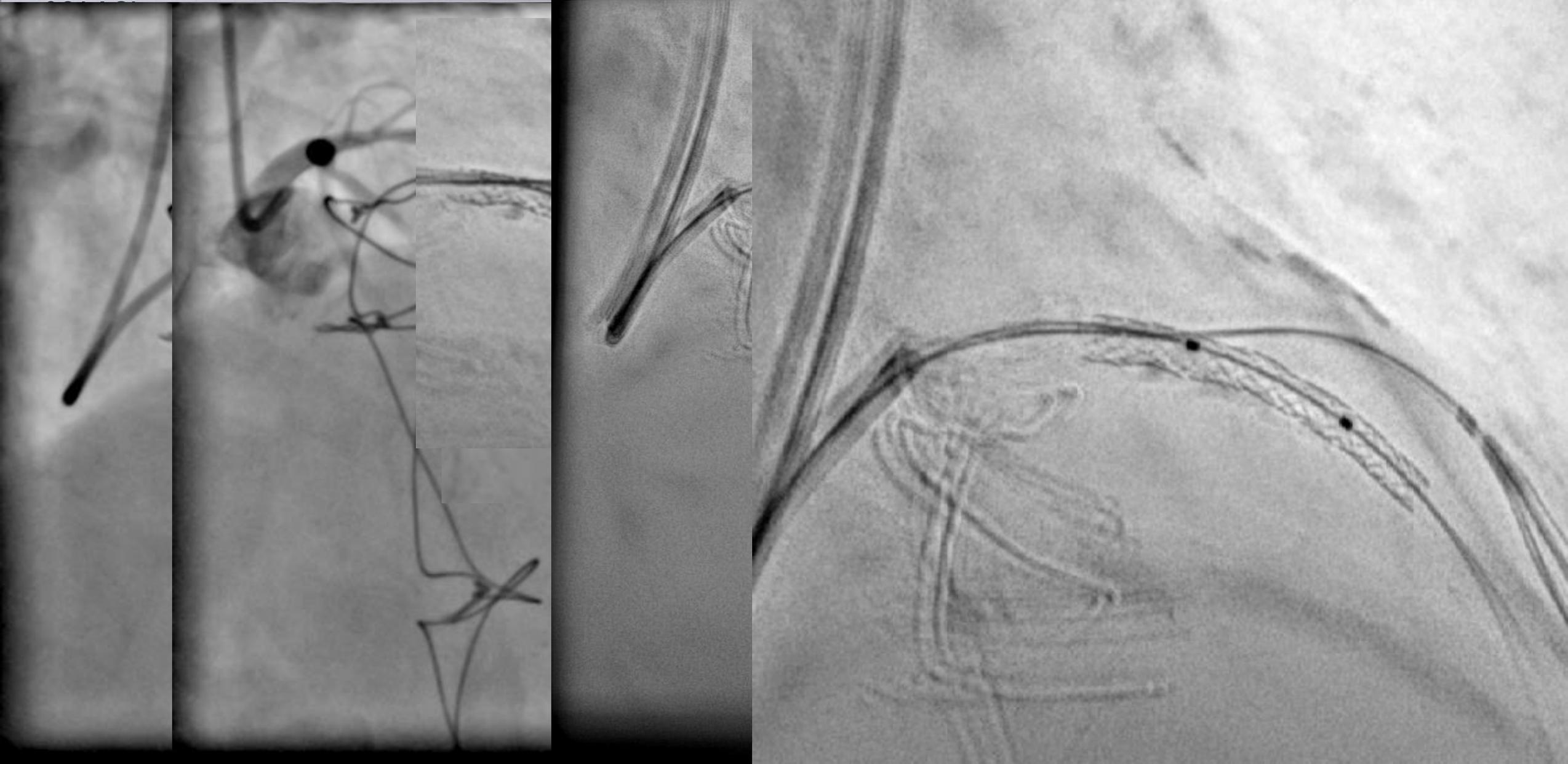


Caso 2 – Homem, 67a, AE com cintilografia + anterior,





Caso 3 – Lesão longa e calcificada na ADA

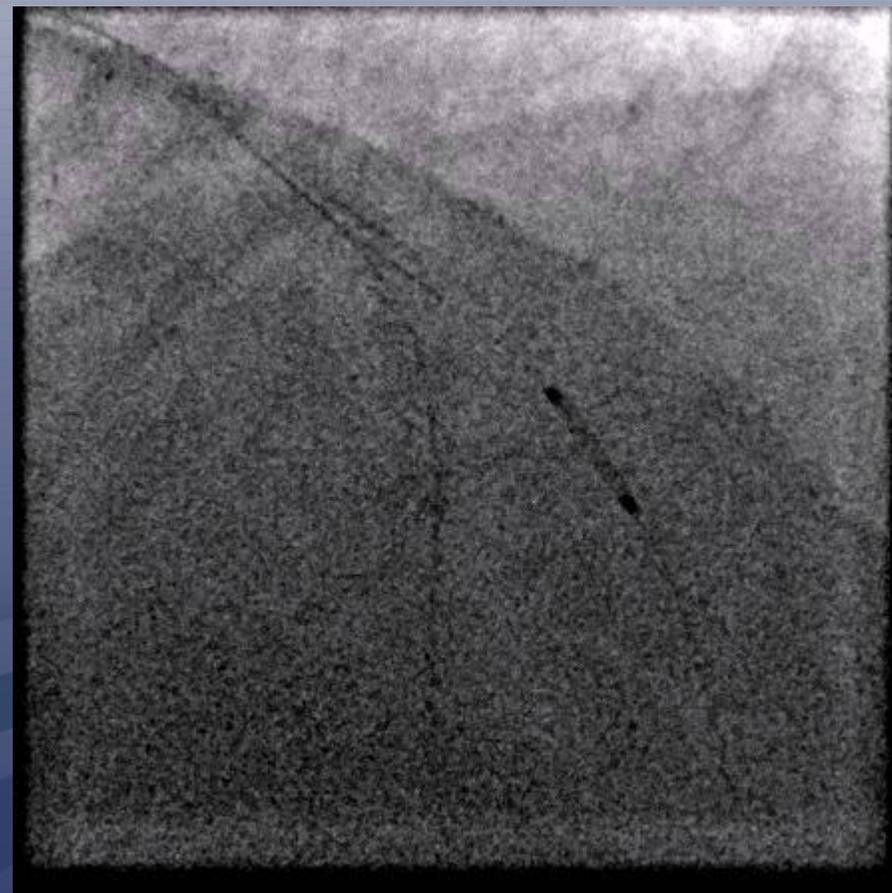




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CLEARstent LIVE

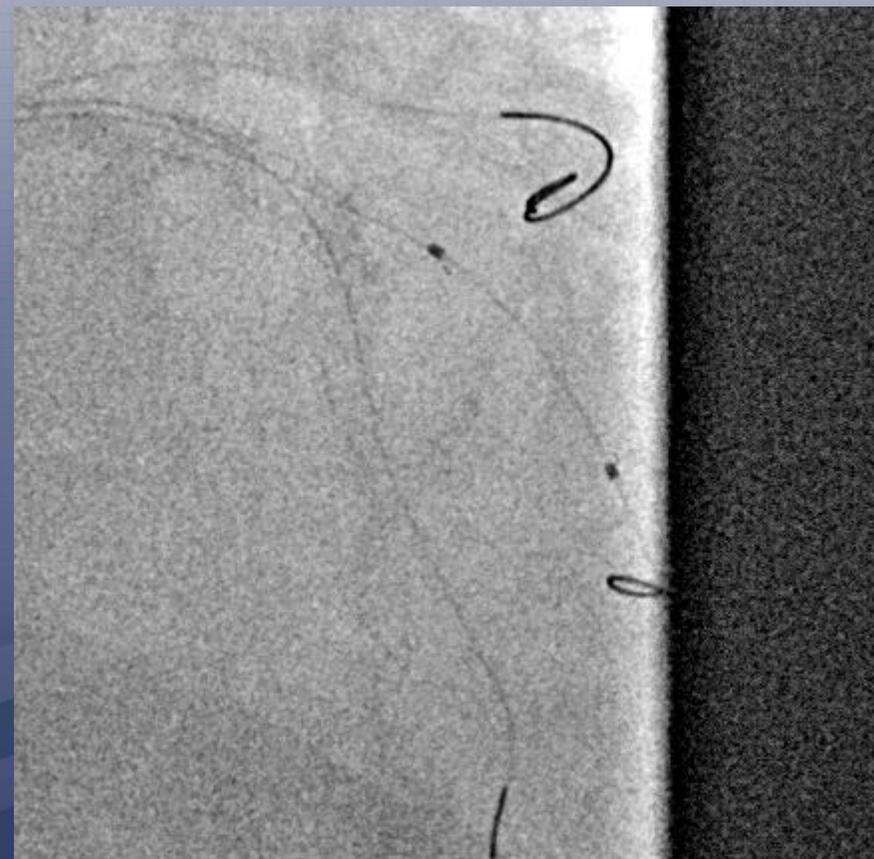




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CLEARstent Live – Implante de Stents bioabsorvíveis

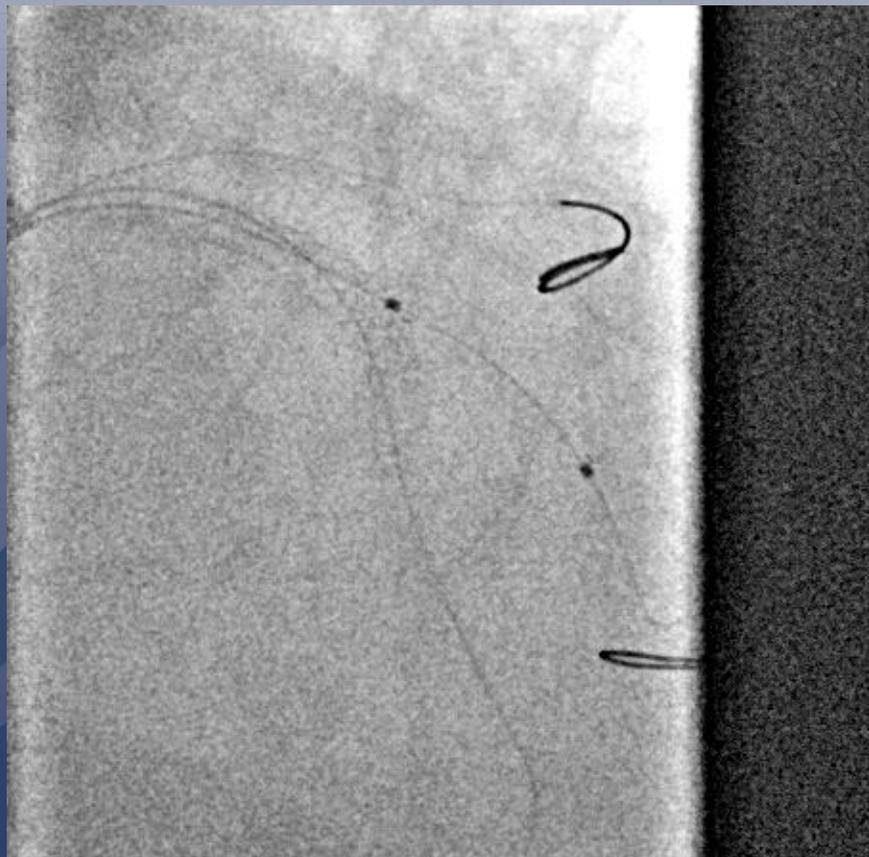




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CLEARstent Live – Implante de Stents bioabsorvíveis





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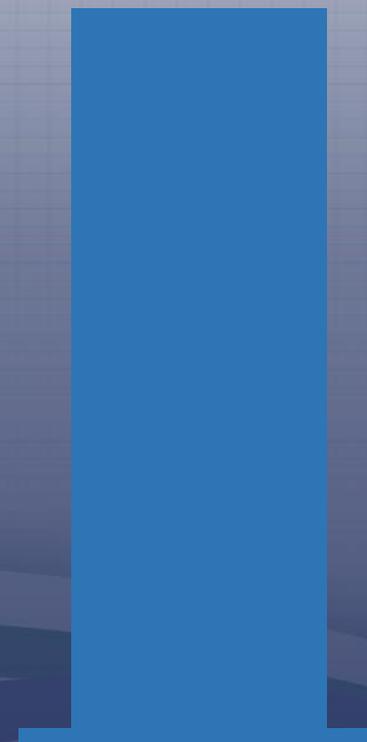
Exposição Radiológica



Fluoroscopy



CLEARstent Live

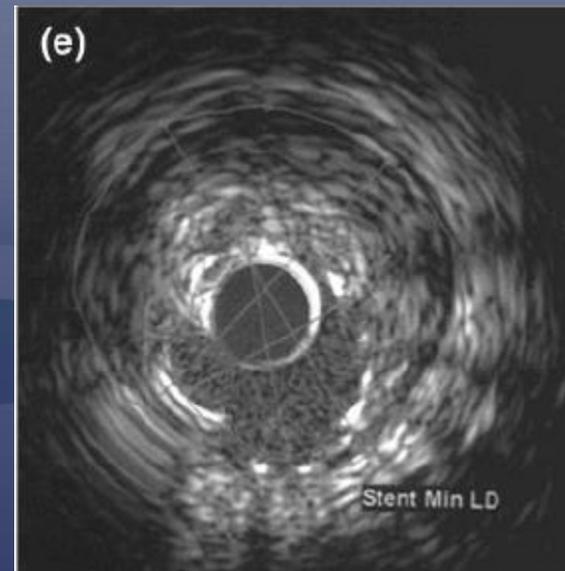
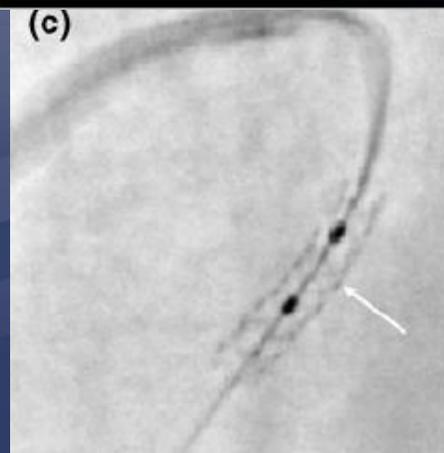
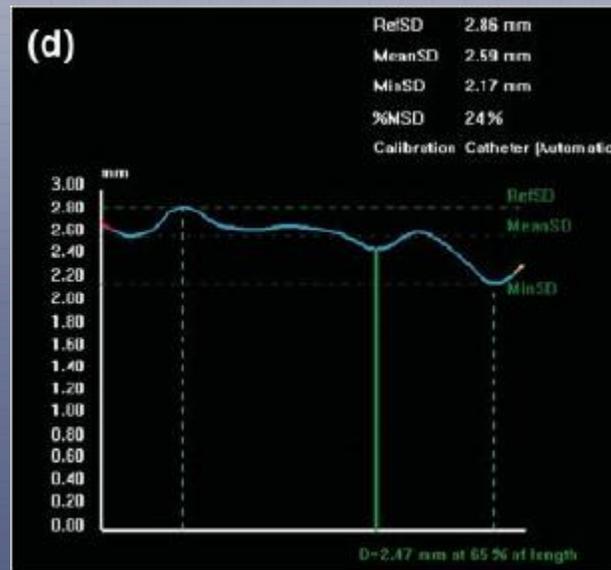
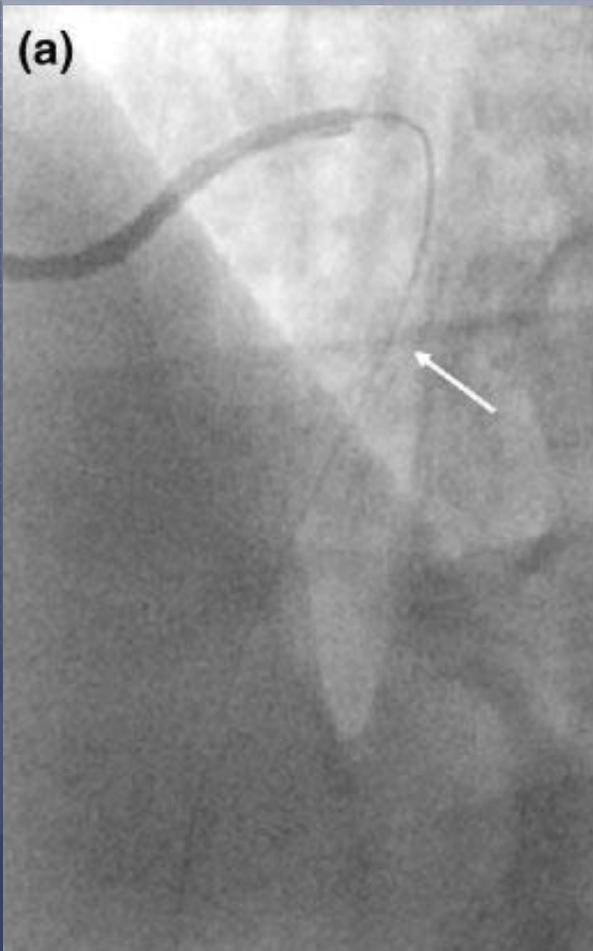


Acquisition



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

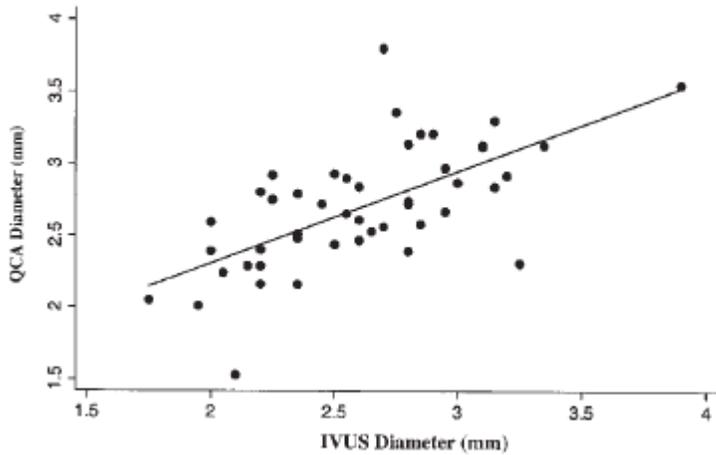
Jacob M. Mishell,¹ MD, Kalpesh T. Vakharia,¹ MD, Thomas A. Ports,¹ MD, Yerem Yeghiazarians,¹ MD, and Andrew D. Michaels,^{2*} MD, MAS



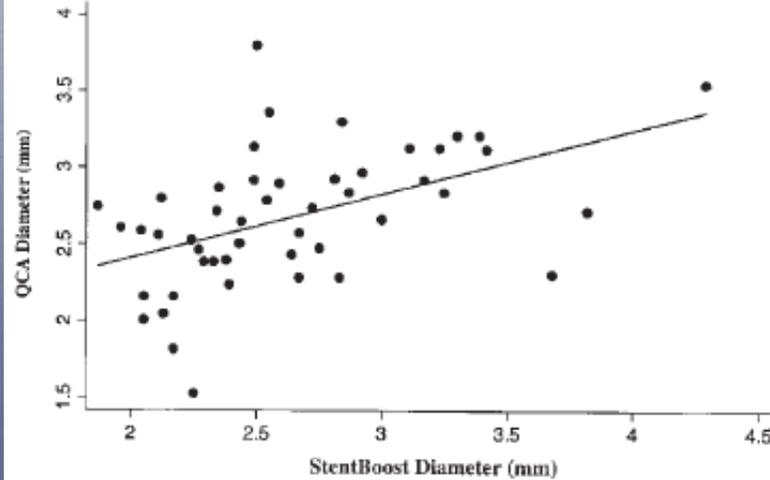


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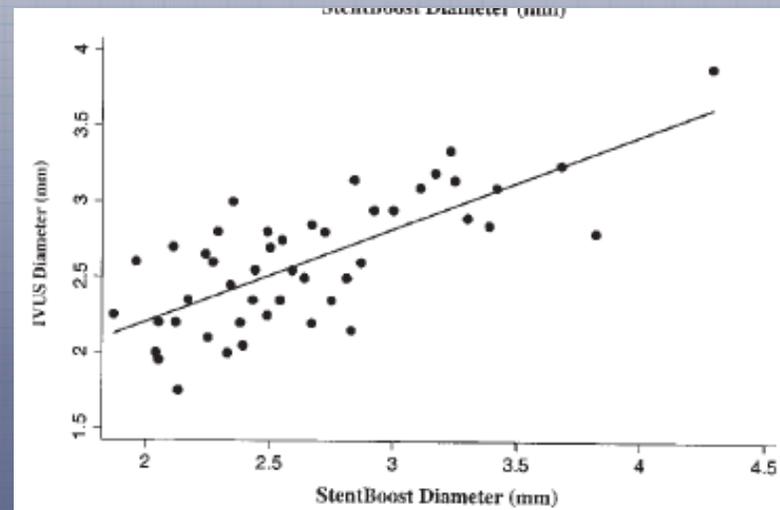
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$N = 47; r = 0,65; P < 0,0001$



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



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

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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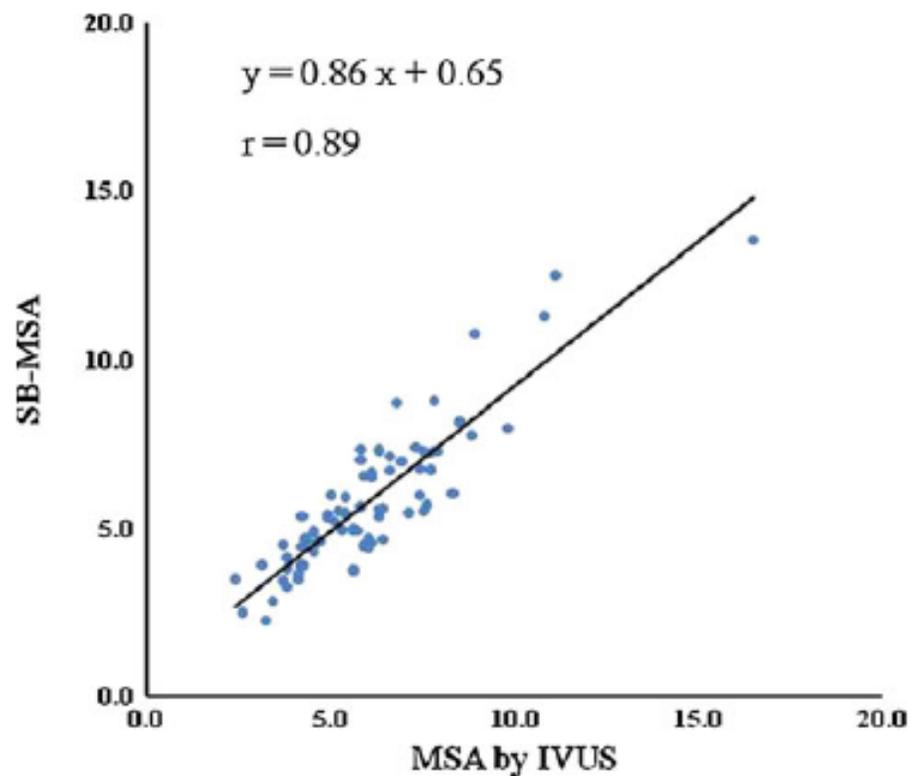
Conclusions

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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