

Tellement complexe...toute la Boite à outils



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The background of the slide is a dark, grayscale photograph of a surgical team in an operating room. Several surgeons wearing masks and caps are visible, focused on their work. The lighting is dim, with the primary light source coming from the surgical field, creating a professional and serious atmosphere.

Les lésions difficiles

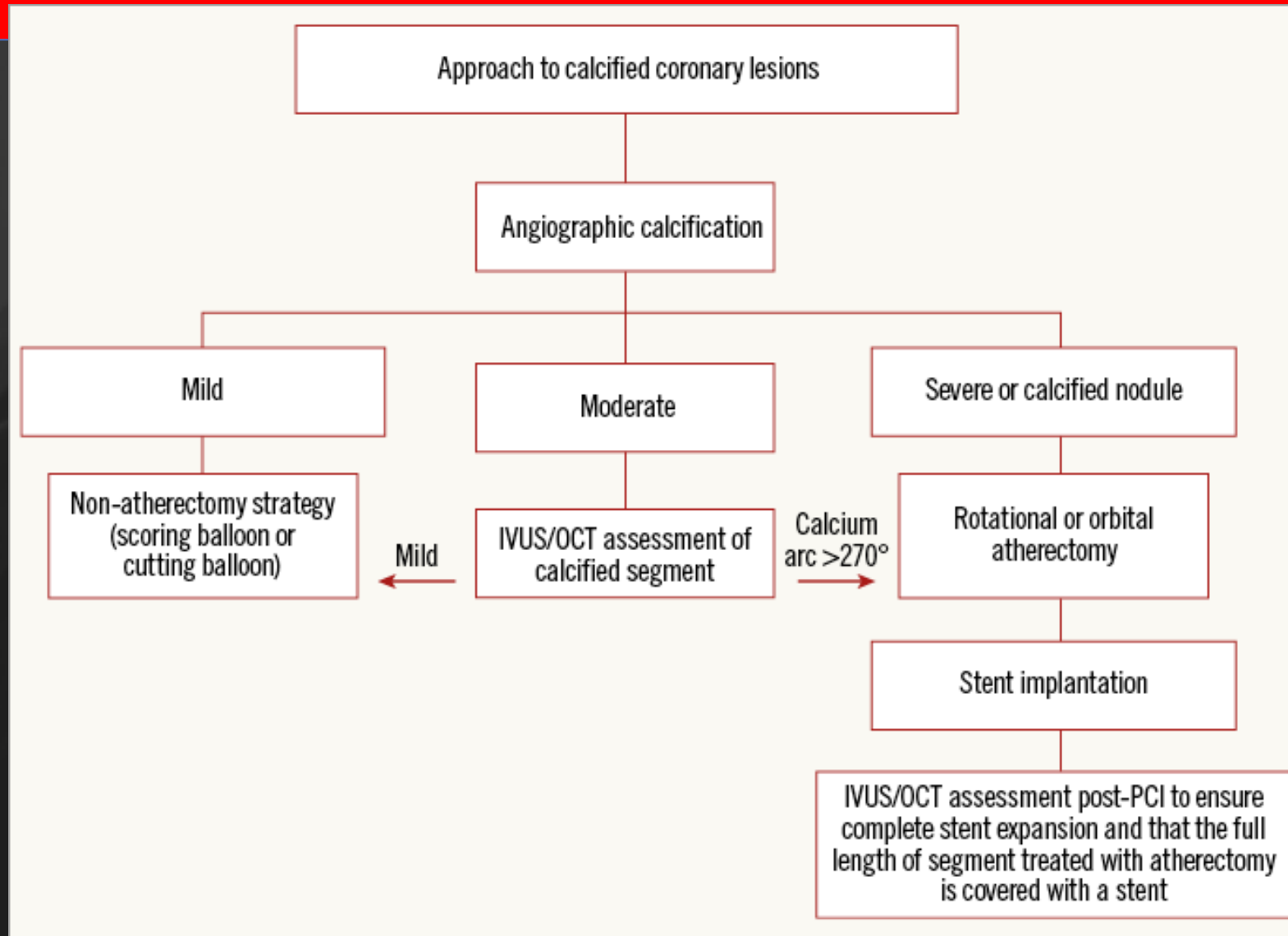
Les lésions difficiles

State of the art: evolving concepts in the treatment of heavily calcified and undilatable coronary stenoses – from debulking to plaque modification, a 40-year-long journey



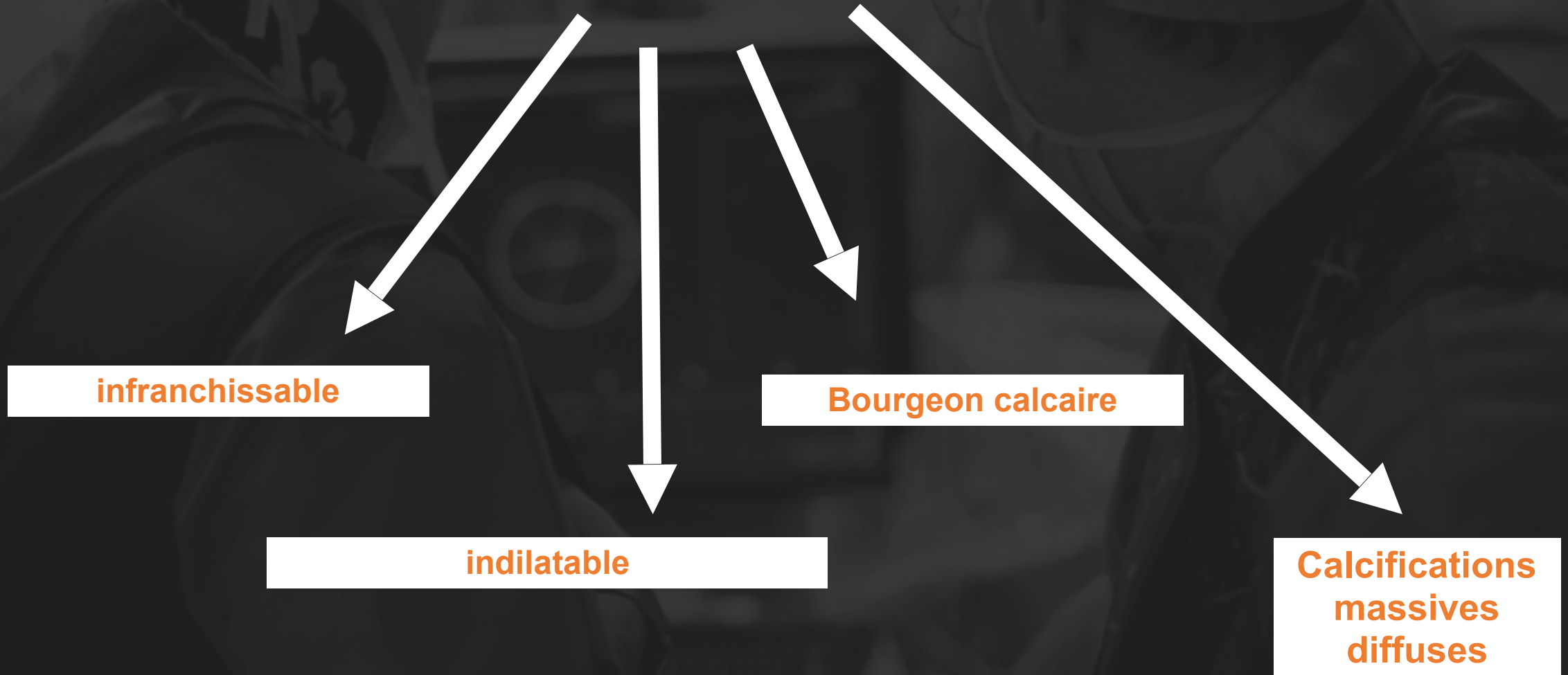
Emanuele Barbato^{1,2*}, MD, PhD; Evan Shlofmitz^{3,4}, DO; Anastasios Milkas^{1,5}, MD;
Richard Shlofmitz⁴, MD; Lorenzo Azzalini⁶, MD, PhD, MSc; Antonio Colombo⁶, MD

Les lésions difficiles



Les lésions difficiles

Athérectomie rotationnelle: ROTABLATOR



Les lésions difficiles

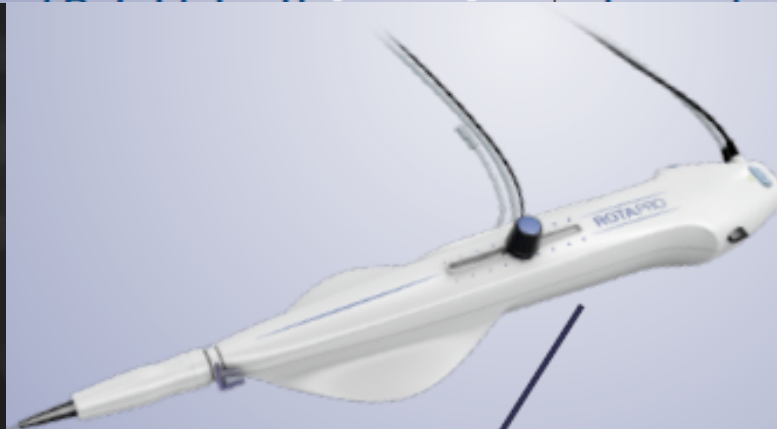
Athérectomie rotationnelle : nouvelle génération

ROTAPRO™ Rotational Atherectomy System

Small console with
intuitive LCD display &
deceleration indicator
(5k & 10k)



Foot Pedal



Advancer with on/off and
Dynaglide controls

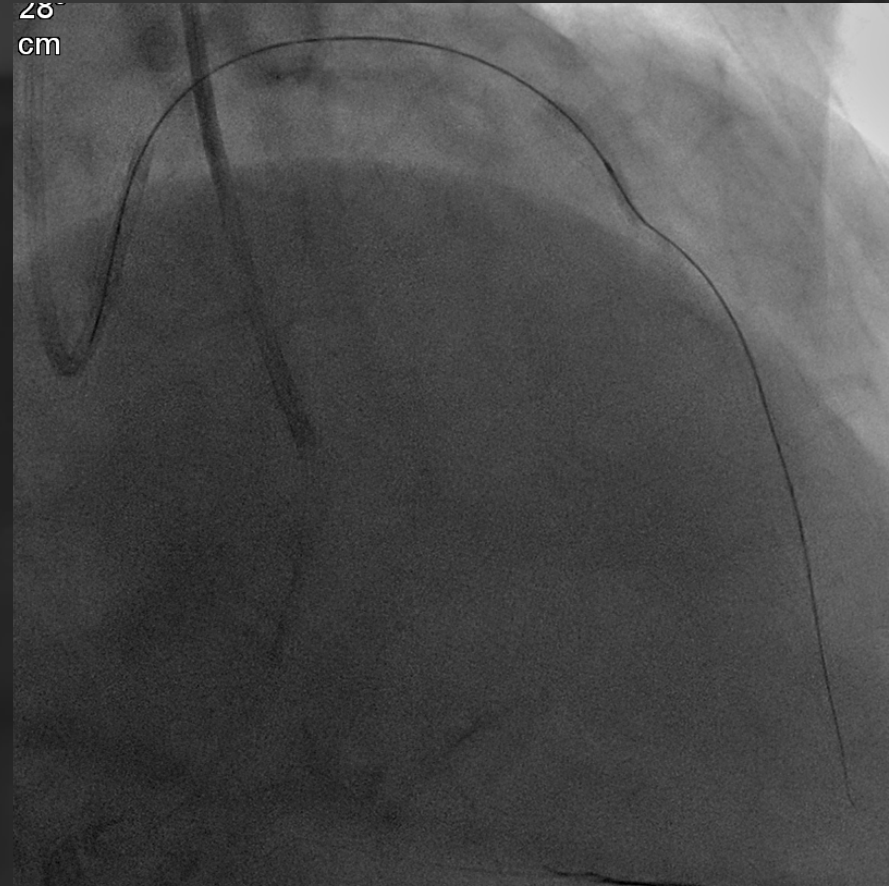
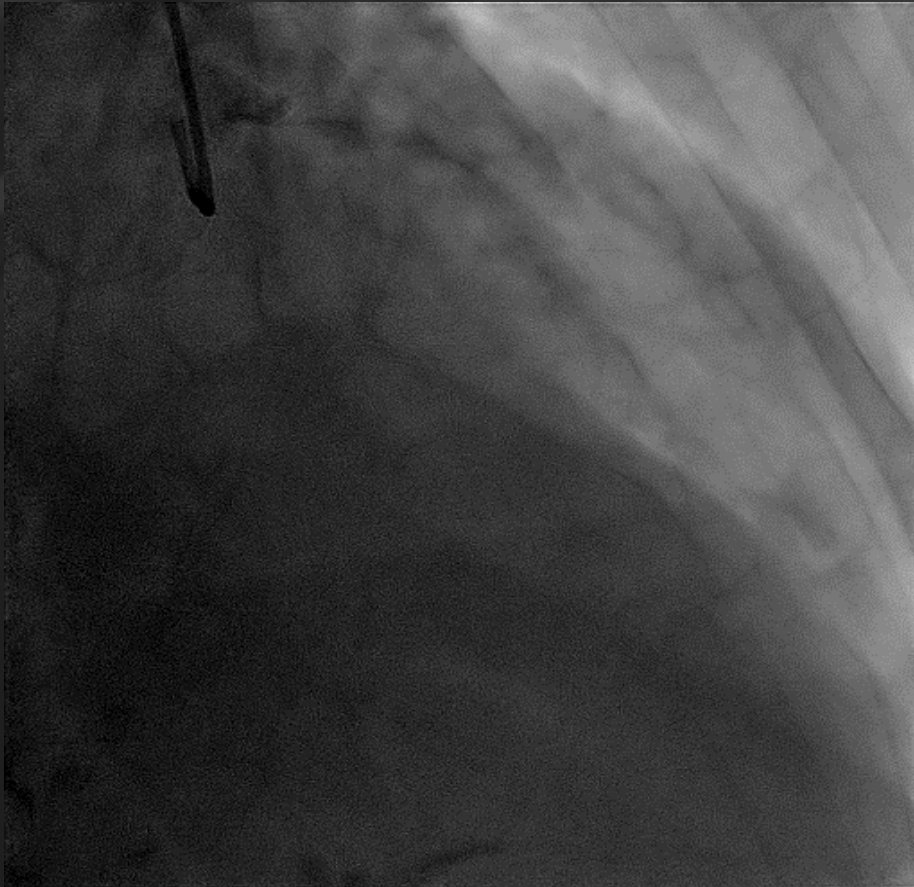
Mobile cart with small
gas tank for quick set-
up and portability



Caution: The ROTAPRO Rotational Atherectomy System is an Investigational Device restricted under federal law to investigational use only. ROTAPRO is not available for sale in the U.S.

Les lésions difficiles

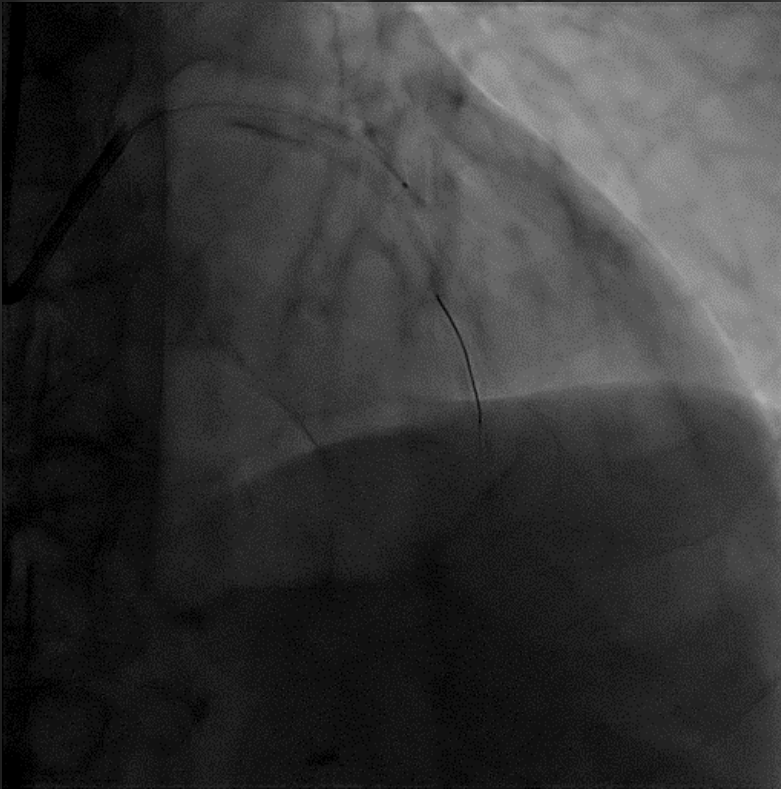
Cas clinique : lésion infranchissable



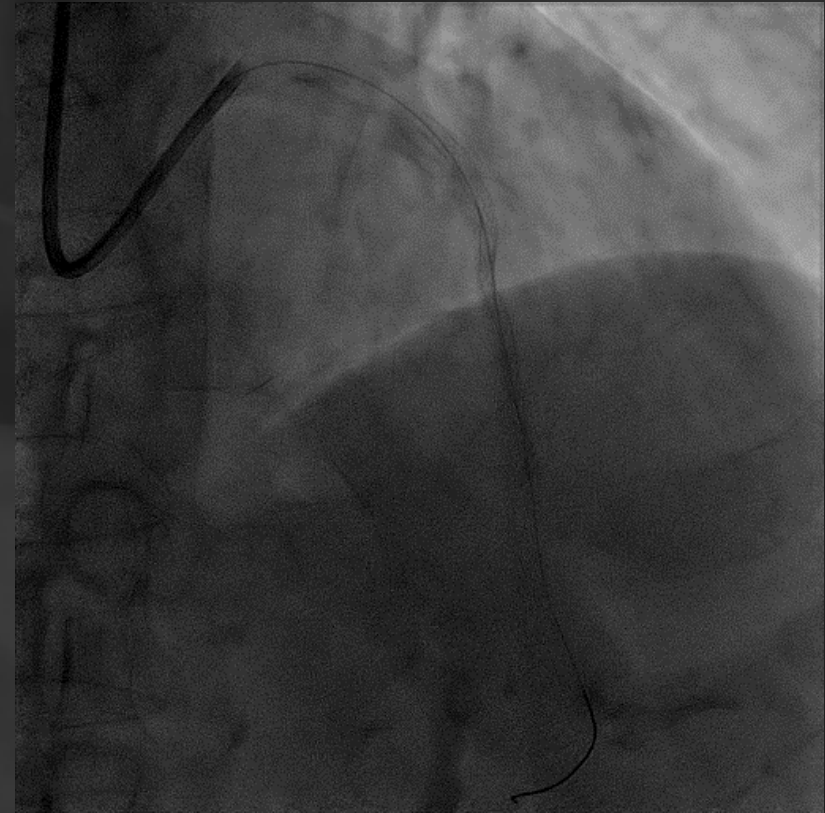
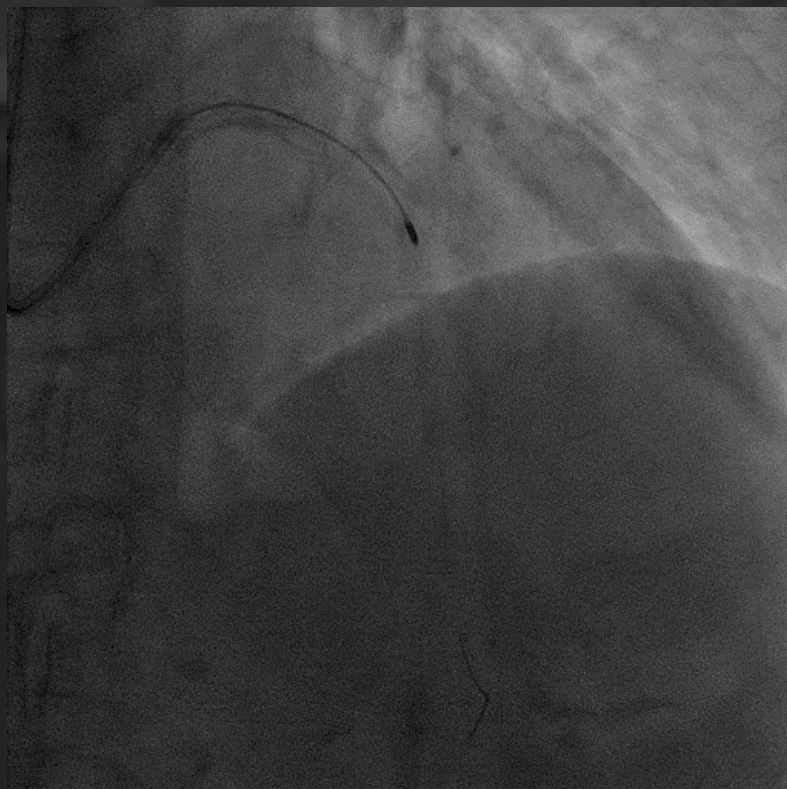
uncrossable lesion : micro14-Finecross-Guidezilla-Sapphire Pro1.0-GrenadoPlasty

Les lésions difficiles

Cas clinique : lésion infranchissable



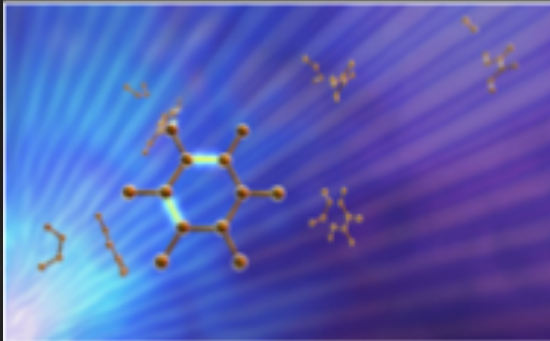
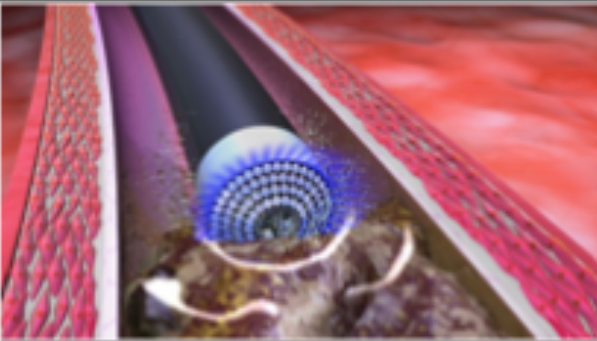
Rotawire



Final result

Les lésions difficiles

Athérectomie au Laser: mécanisme d'action

① Photochemical	② Photothermal	③ Photomechanical
Breaking molecular bonds	Producing thermal energy	Creating kinetic energy
		

>>> plaque softening

Les lésions difficiles

Resténose intrastent : Laser

Trek 2.5x20mm
22ATM

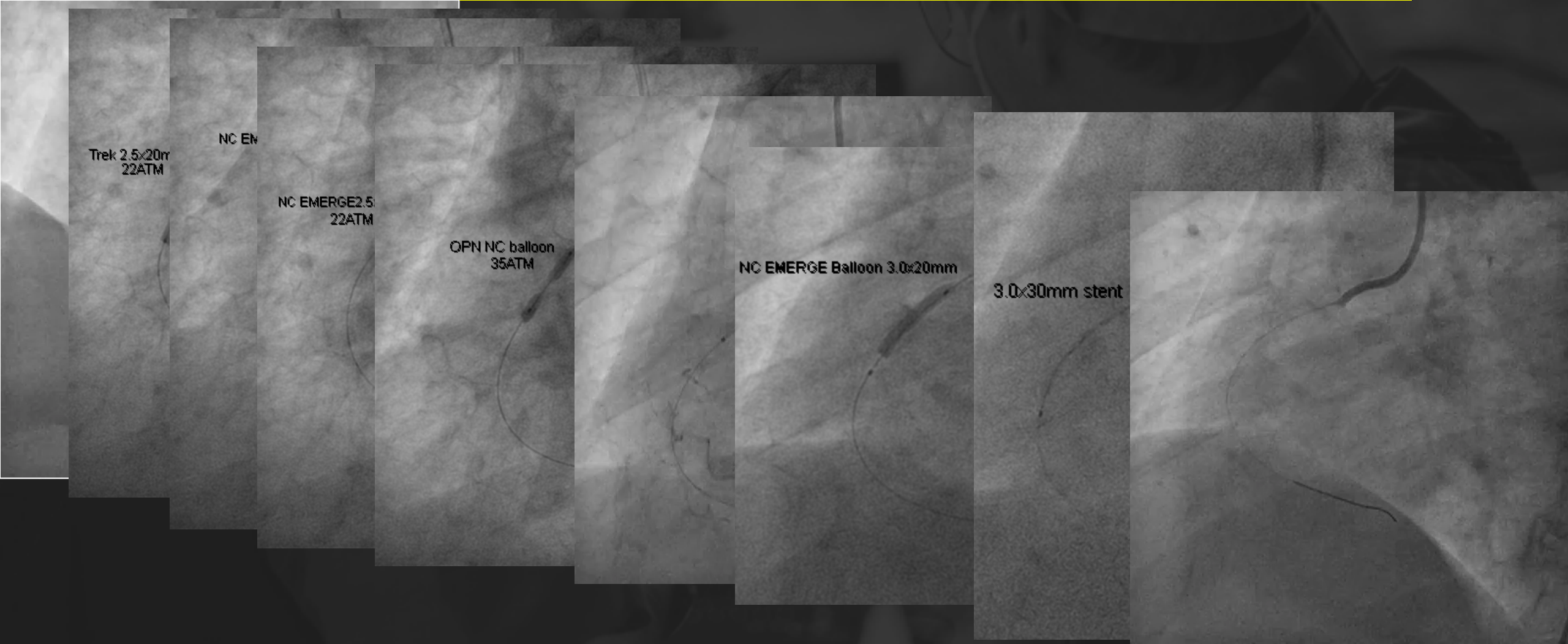
NC EM

NC EMERGE2.5
22ATM

OPN NC balloon
35ATM

NC EMERGE Balloon 3.0x20mm

3.0x30mm stent



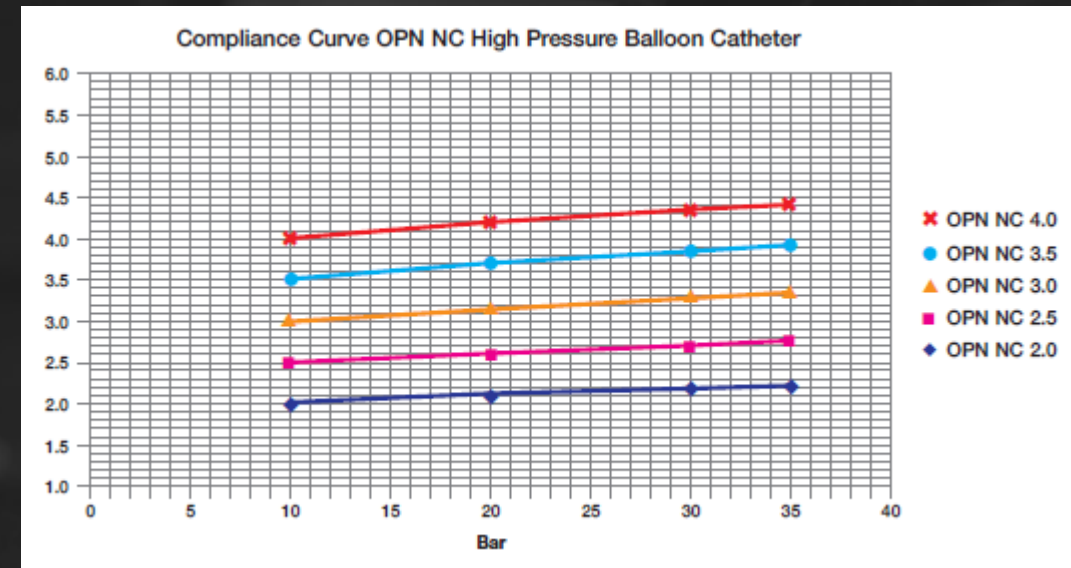
Les lésions difficiles

Ballons à très haute pression: OPN

Vascularperspectives
innovations for the interventionalist

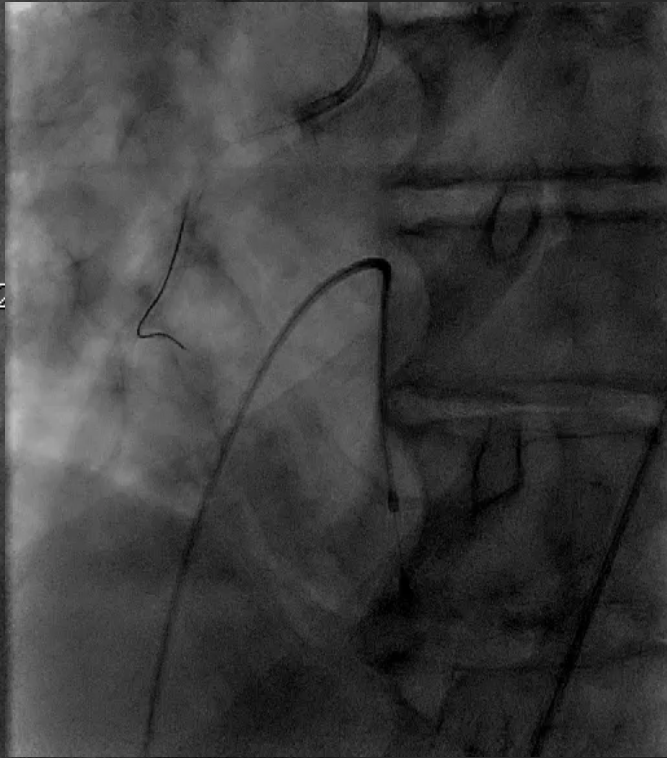
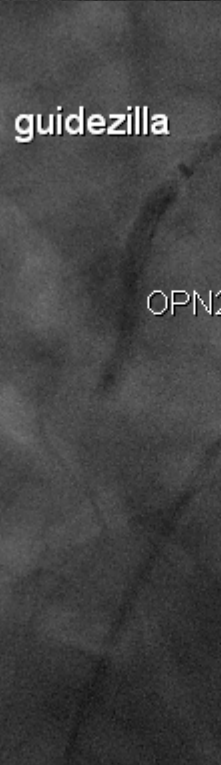
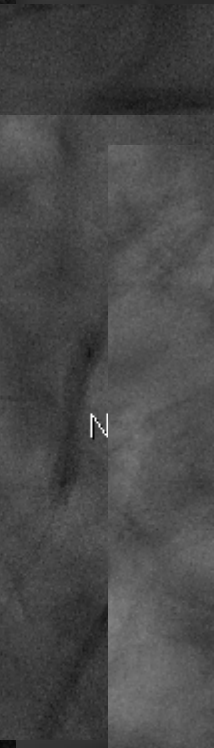
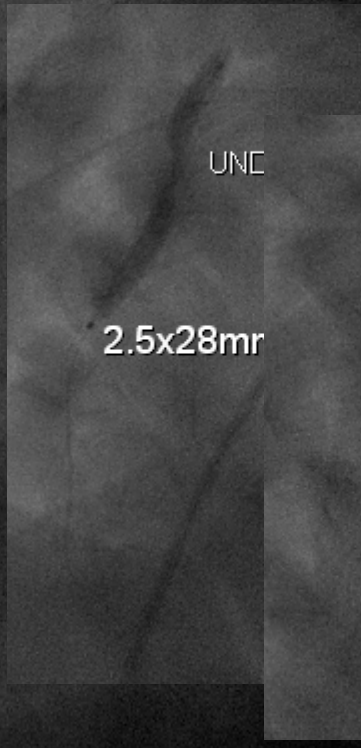
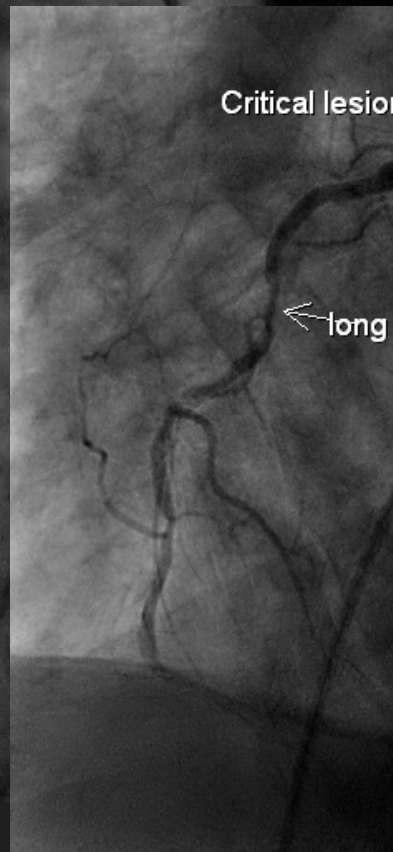


	Pressure	OPN NC 2.0	OPN NC 2.5	OPN NC 3.0	OPN NC 3.5	OPN NC 4.0
NOM	10	2.0	2.5	3.0	3.5	4.0
	20	2.1	2.6	3.14	3.67	4.19
	30	2.18	2.7	3.29	3.85	4.37
RBP	35	2.2	2.77	3.36	3.91	4.41



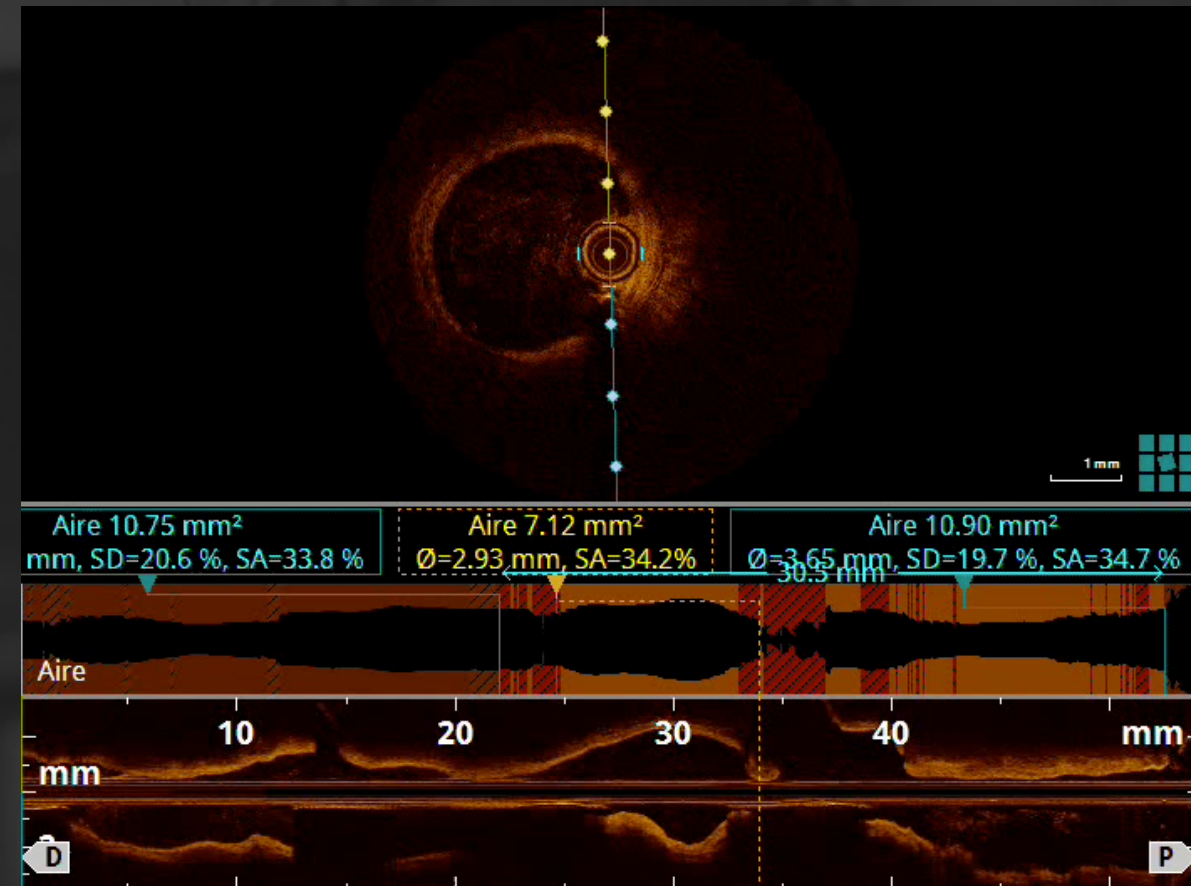
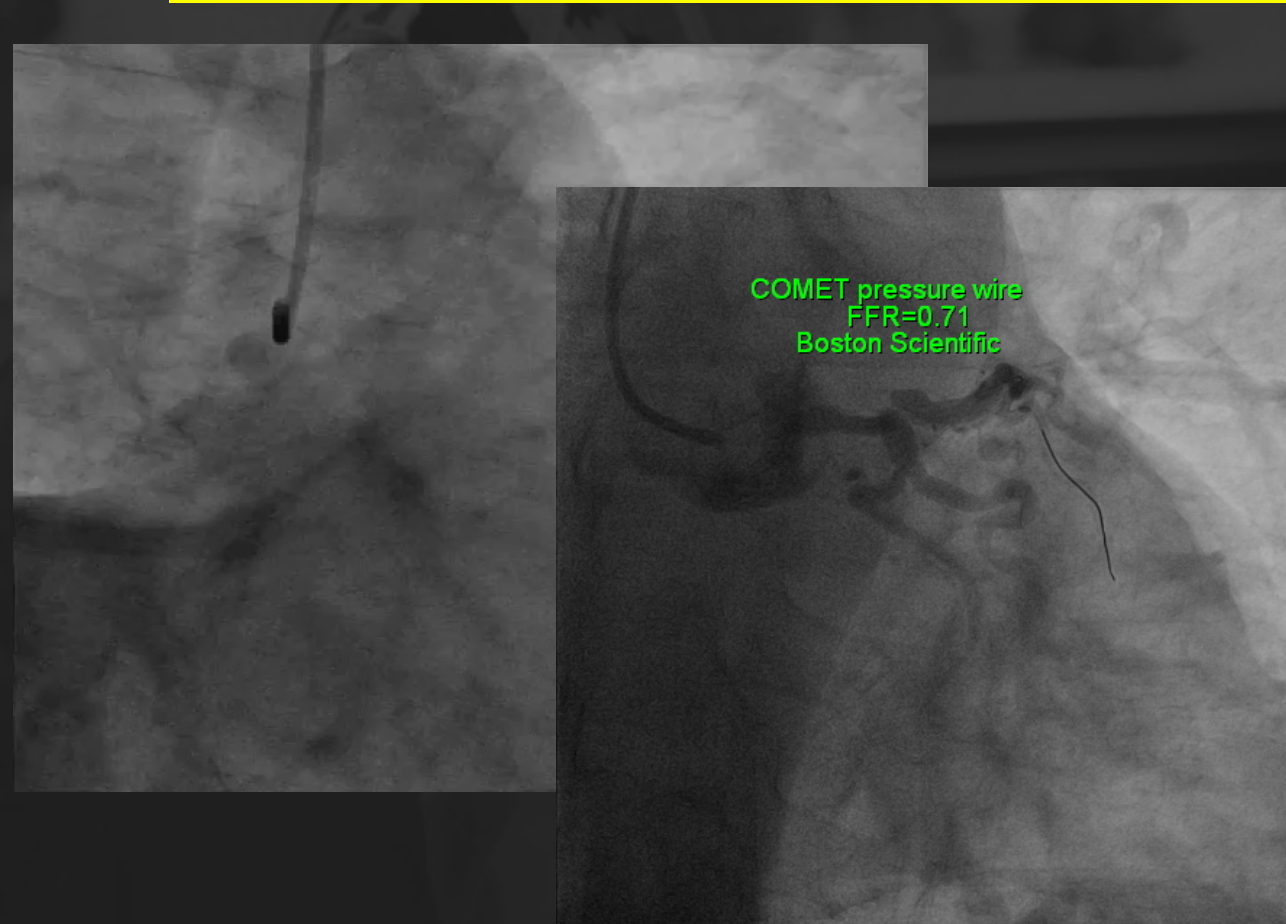
Les lésions difficiles

Ballons à très haute pression: stent non dilatable



Les lésions difficiles

FFR OCT Stentboost



Les lésions difficiles

FFR OCT Stentboost

POT NC 4.5

re-POT 4.5x15mm

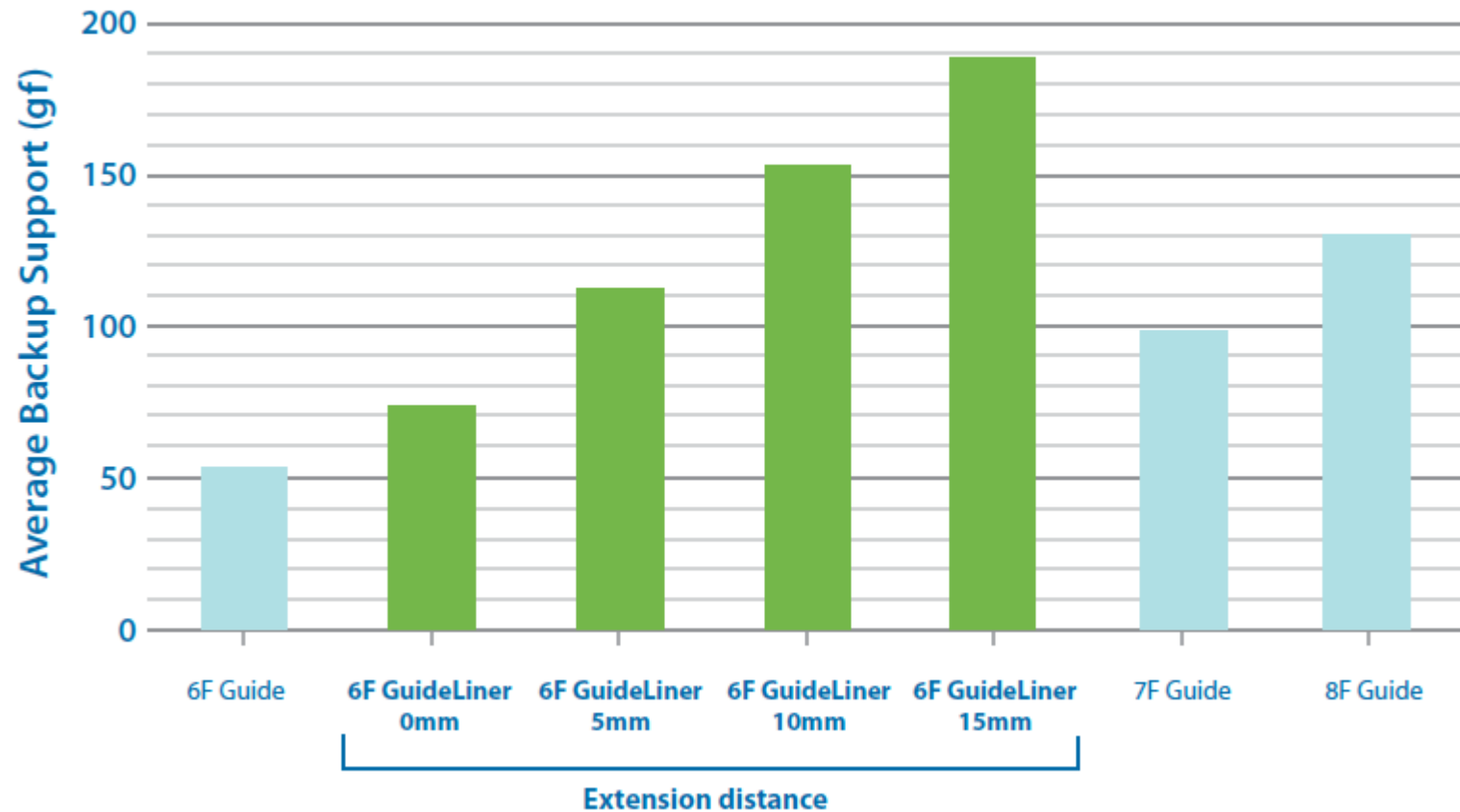
Les lésions difficiles

Les extensions de guiding catheter : support++

Augmenter le support actif:
Délivrer les ballons, les
stents, fraise de ROTA



Bench testing demonstrates the 6F GuideLiner substantially increases backup support compared to standard guide catheters.



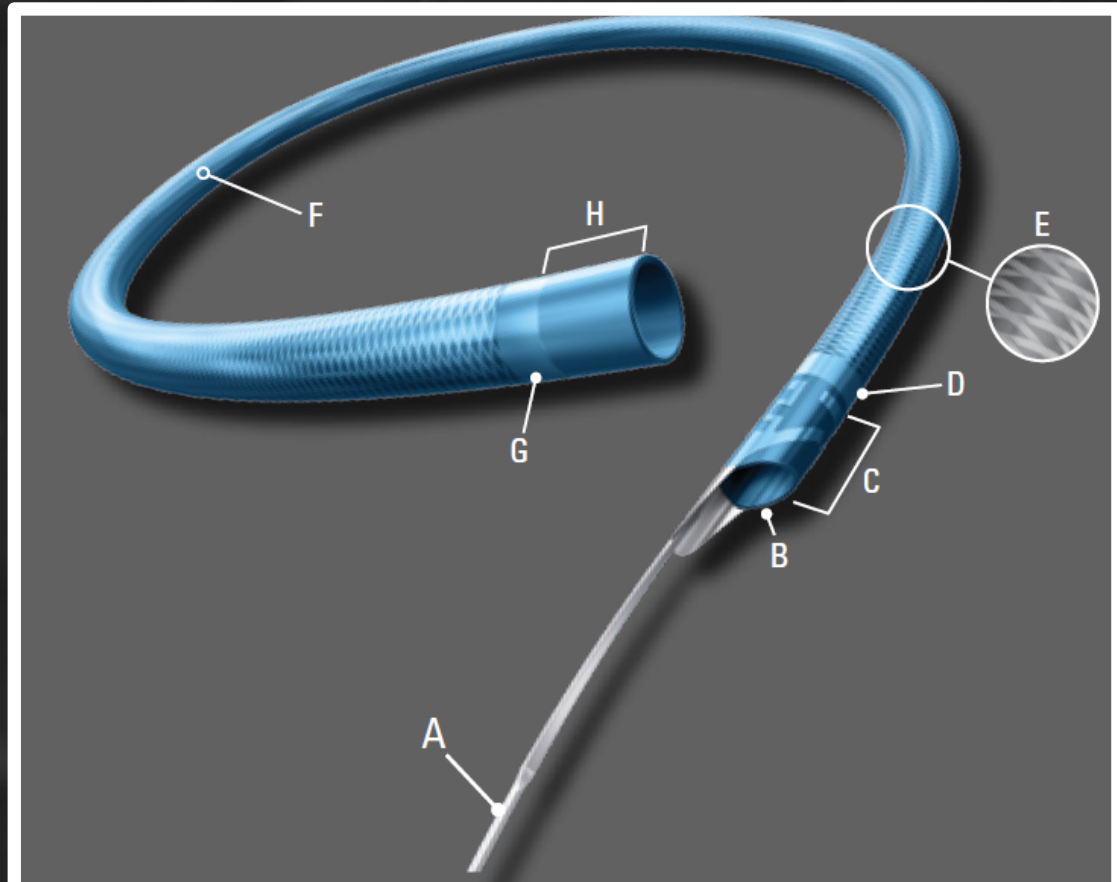
Les lésions difficiles

Les extensions de guiding catheter

GUIDEZILLA™ II

Disponible pour 6,7 et 8F

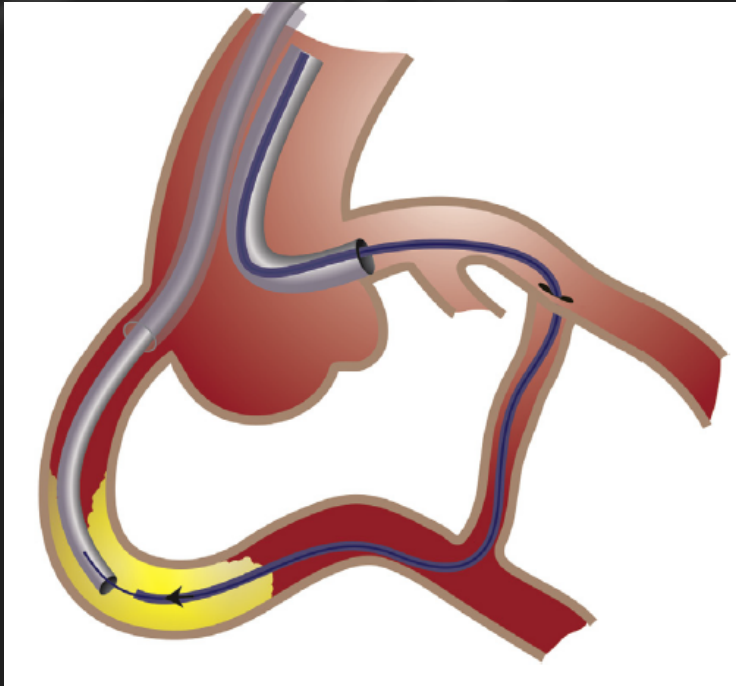
- A 120 cm Proximal hypotube shaft
- B 0.057" (1.45 mm) Inner-diameter
- C Stainless steel collar embedded in polymer
- D Proximal marker band
- E 1×1 Braid
- F Hydrophilic coating
- G Distal marker band
- H Atraumatic tip



Les lésions difficiles

Les extensions de guiding catheter: autres usages

Assisted reverse CART



GuideLiner reverse controlled antegrade and retrograde tracking and dissection.

Manual of Chronic Total Occlusion Interventions

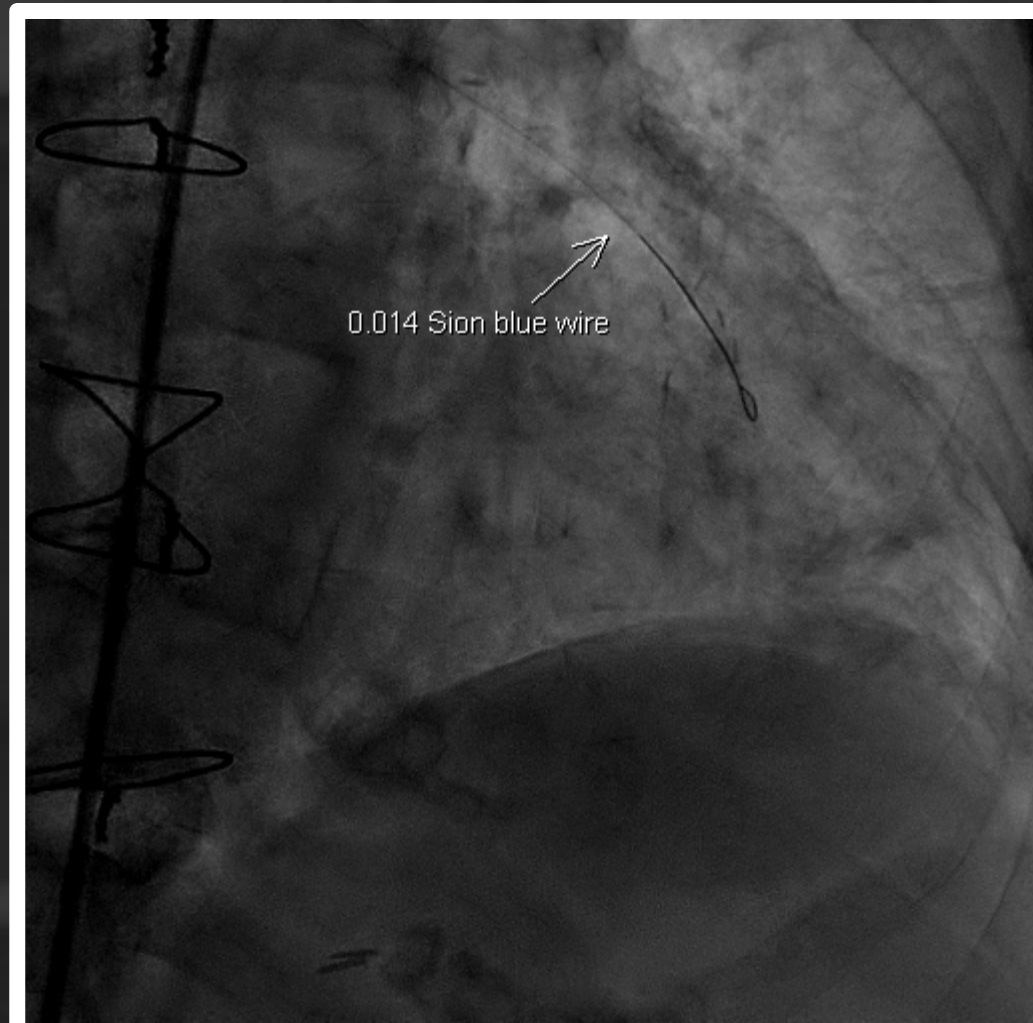
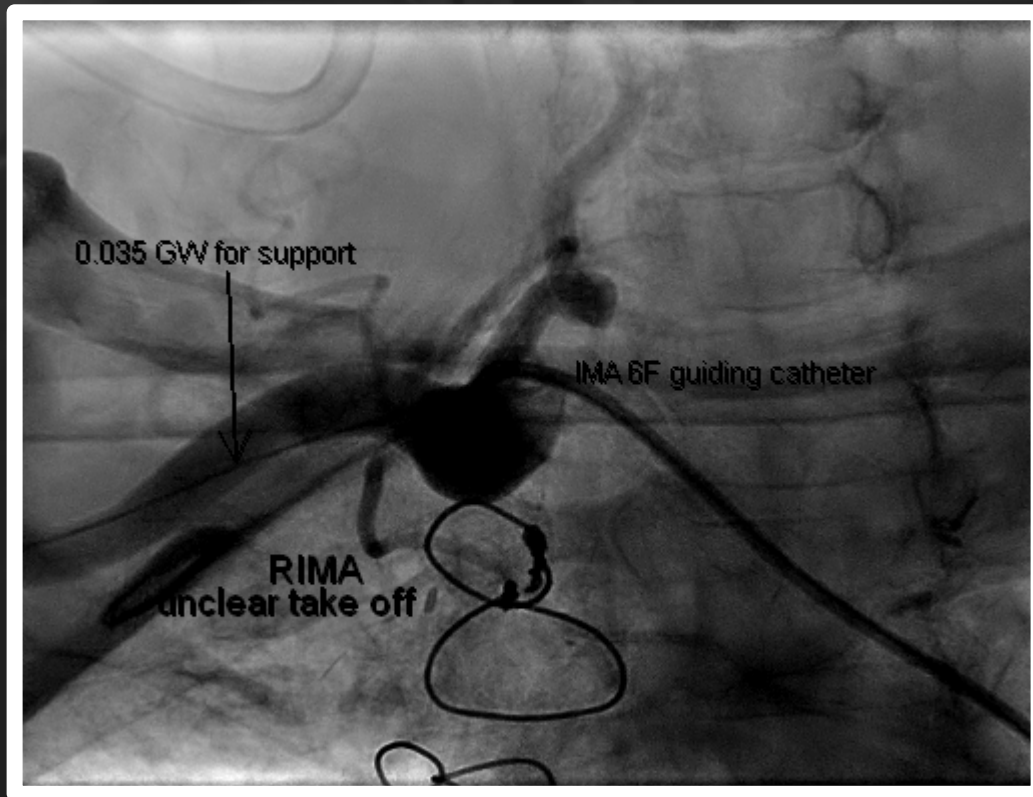
Home made Snare: by
Kambis mashayekhi



From Emmanual Brilakis web-channel

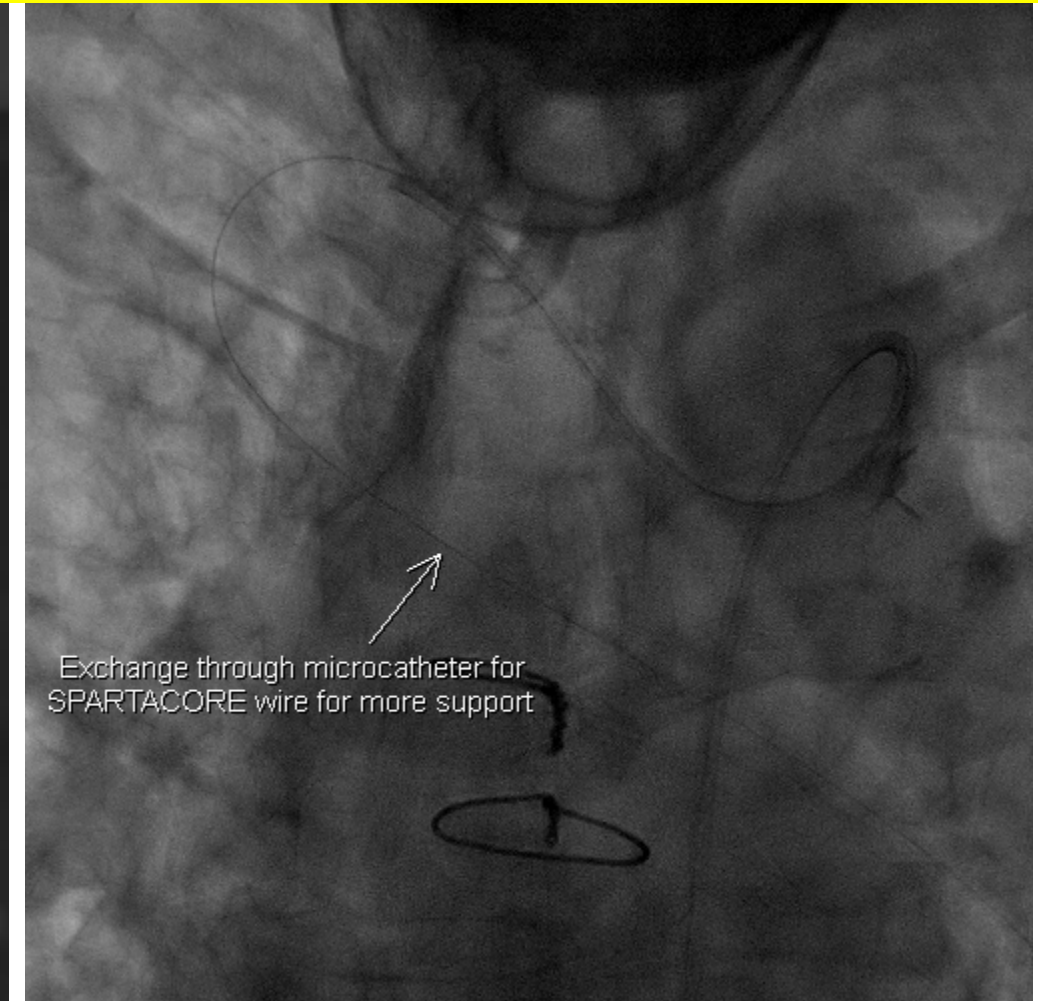
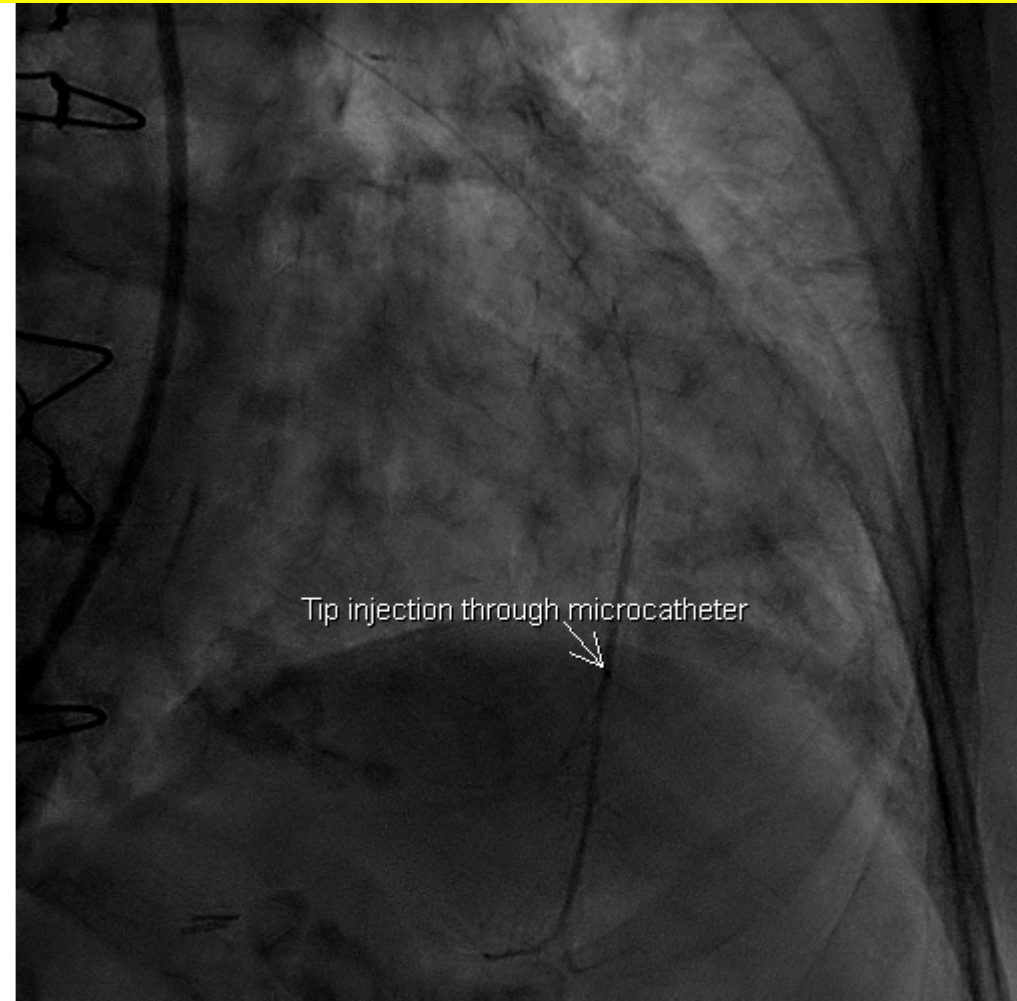
Les lésions difficiles

Les extensions de guiding catheter: cas clinique



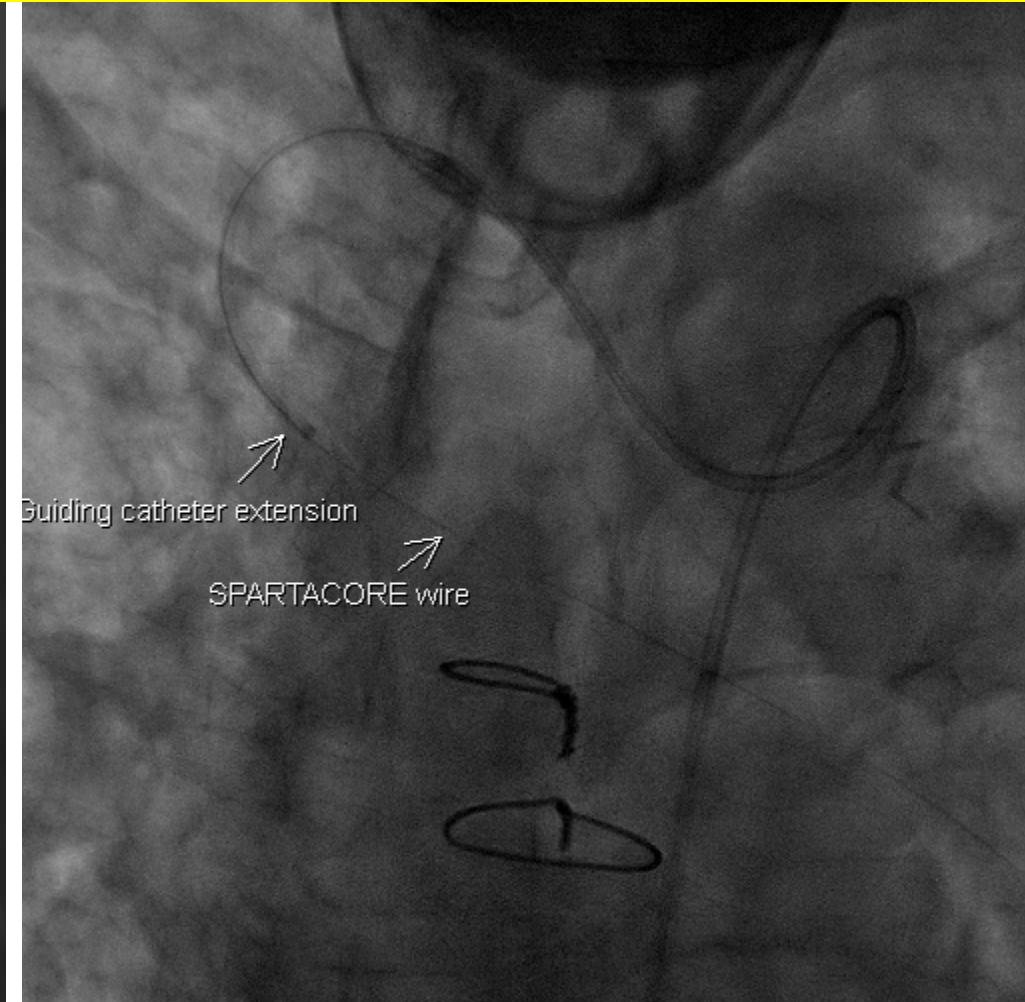
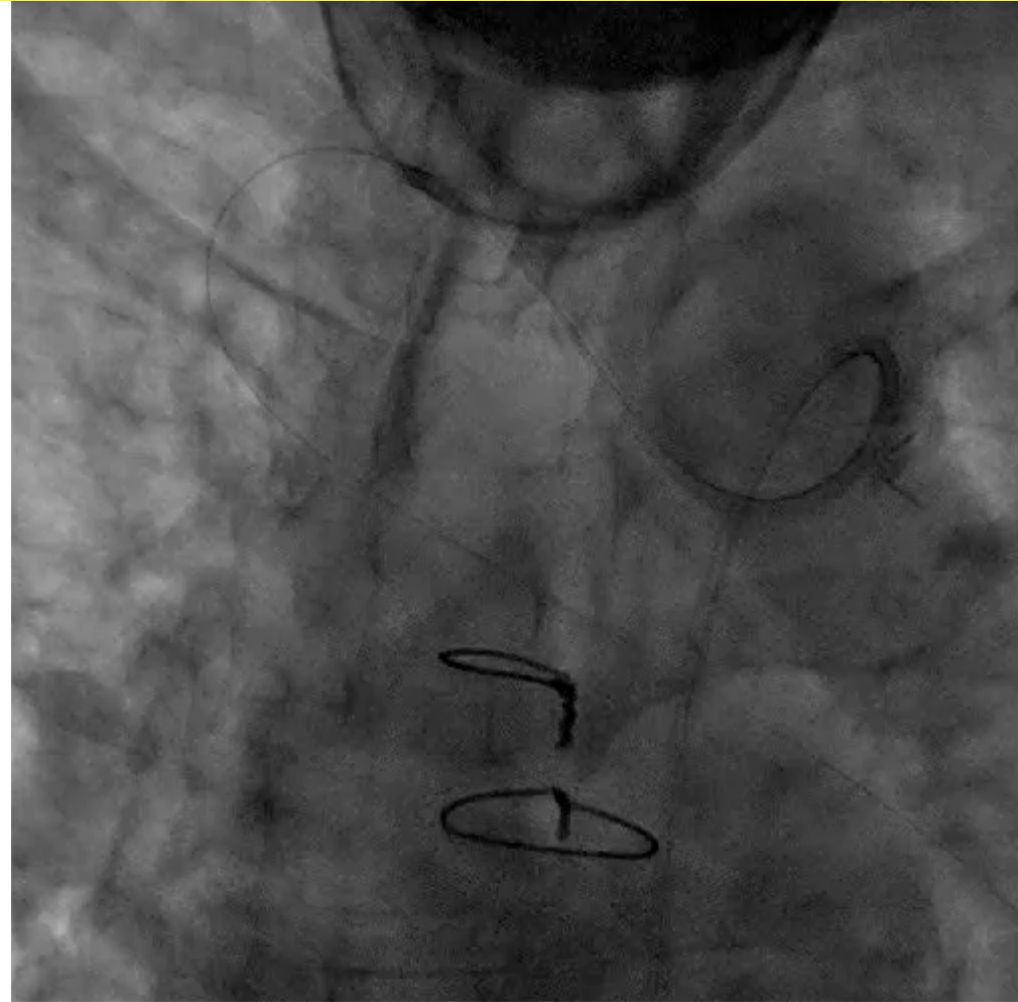
Les lésions difficiles

Les extensions de guiding catheter: cas clinique



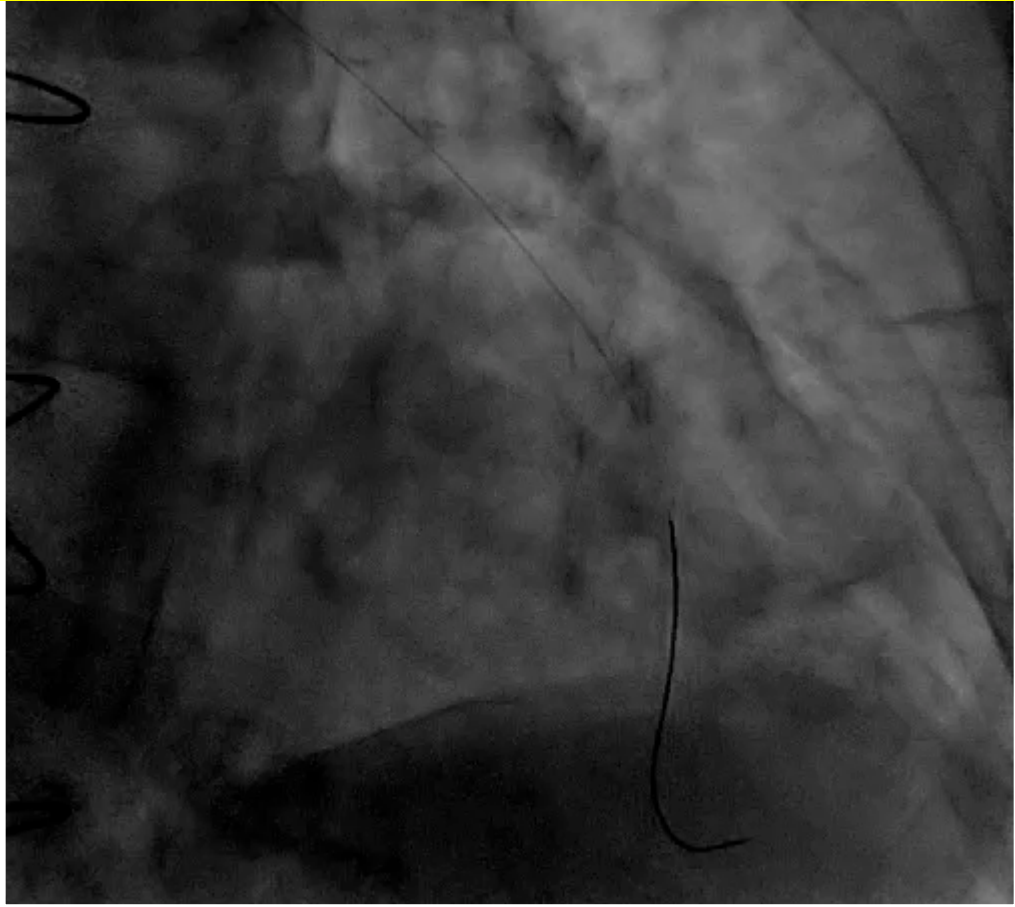
Les lésions difficiles

Les extensions de guiding catheter: cas clinique



Les lésions difficiles

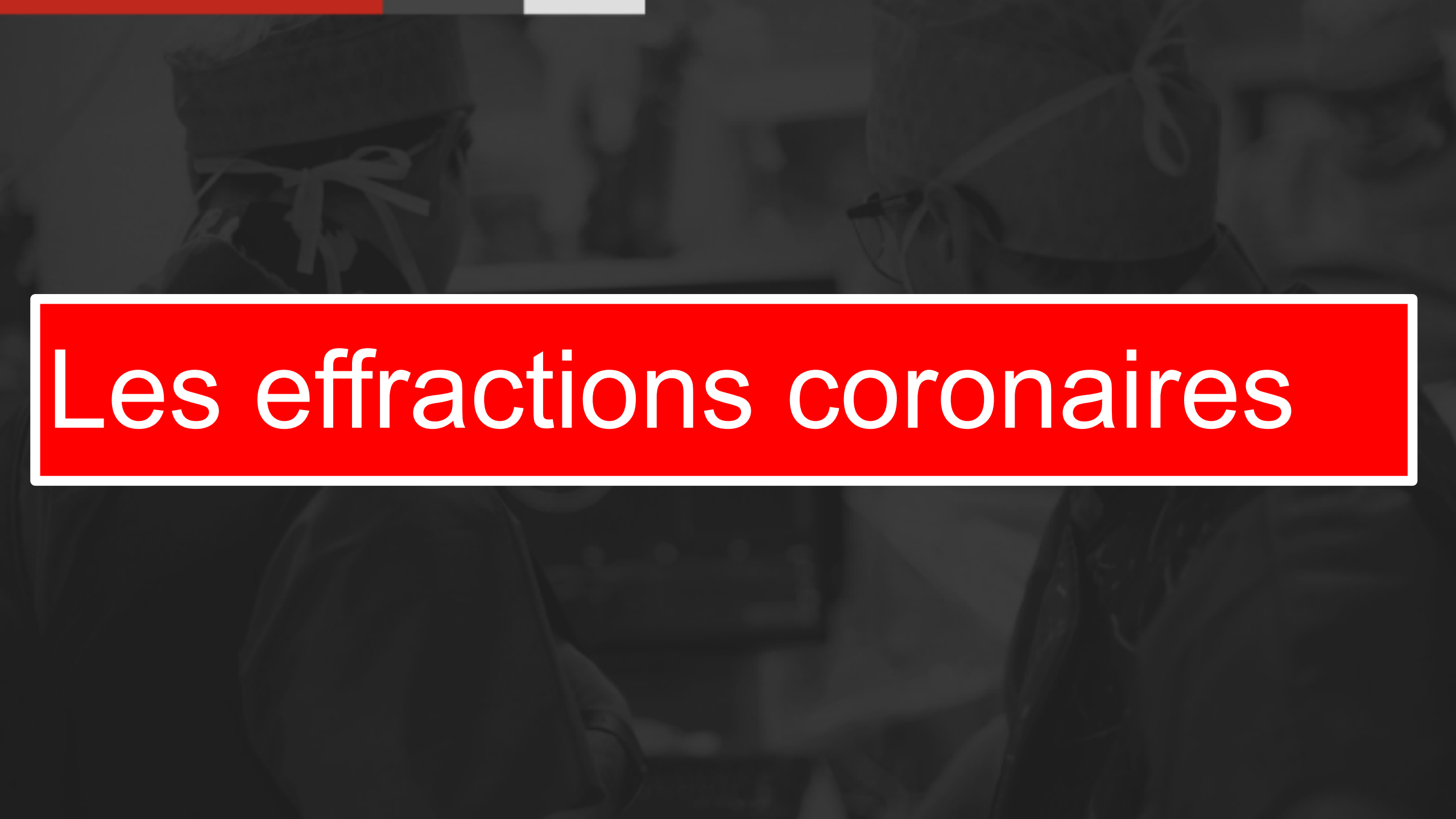
Les extensions de guiding catheter:



Before



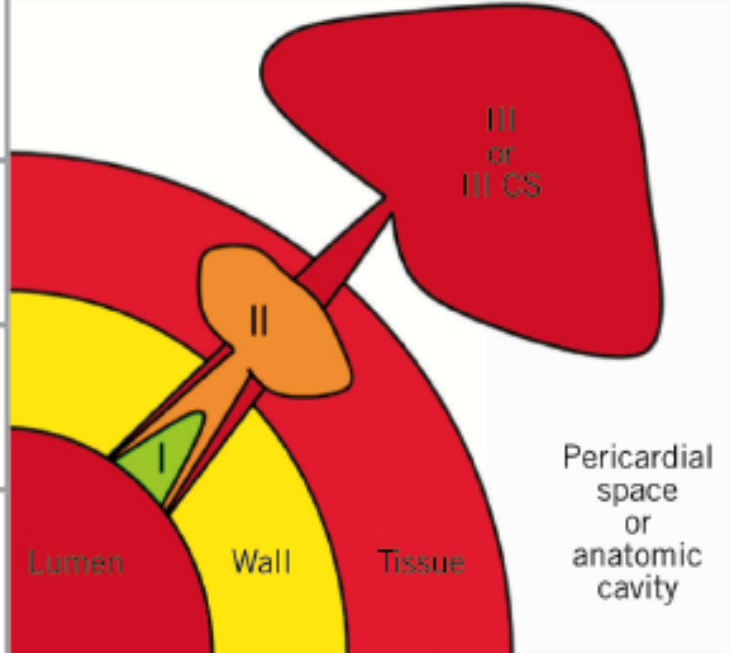
After

The background of the slide is a dark, grayscale photograph of a surgical team in an operating room. Several surgeons are visible, wearing blue scrubs and surgical masks. They are focused on a patient, with their hands and instruments visible in the lower part of the frame. The lighting is dim, typical of an OR, with the primary light source coming from the surgical lights above the patient.

Les effractions coronaires

Les effractions coronaires :

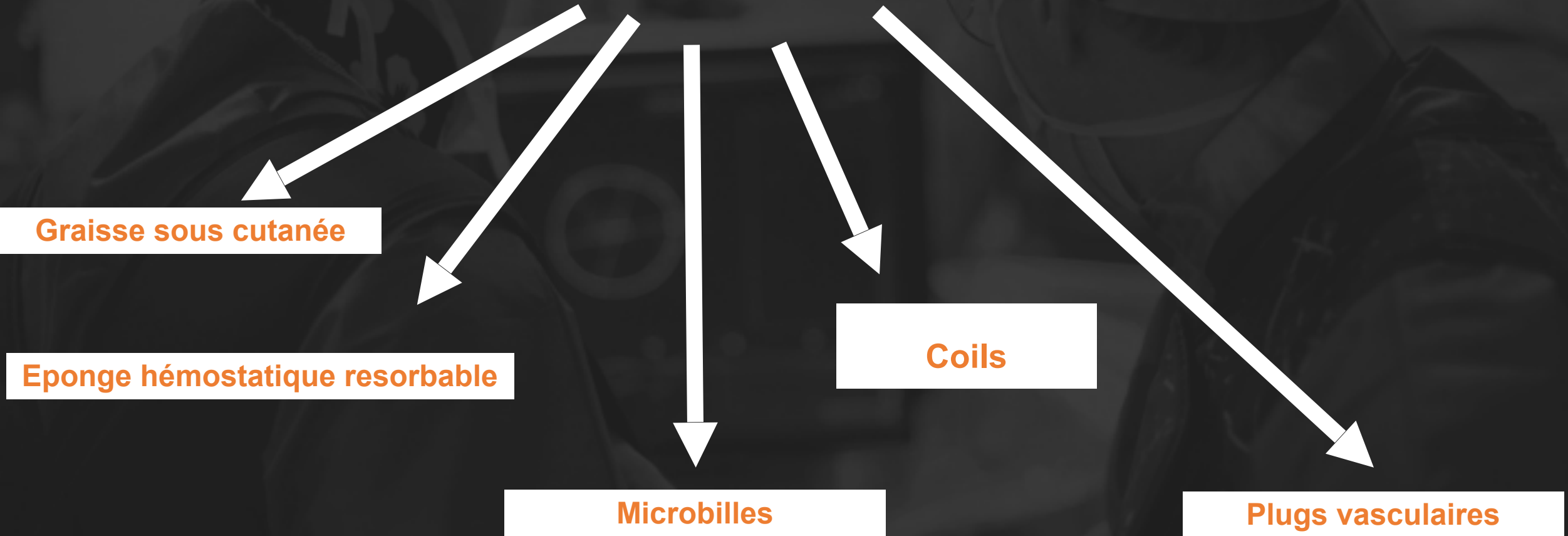
Sur guide, ballon, stent, fraise de Rota...

Type I	Extraluminal crater without extravasation	
Type II	Pericardial or myocardial blush without contrast jet extravasation	
Type III	Extravasation through frank (>1 mm) perforation	
*Type III cavity spilling (CS)	Perforation into an anatomic cavity, chamber, coronary sinus, etc.	

*Sometimes referred to as Type IV

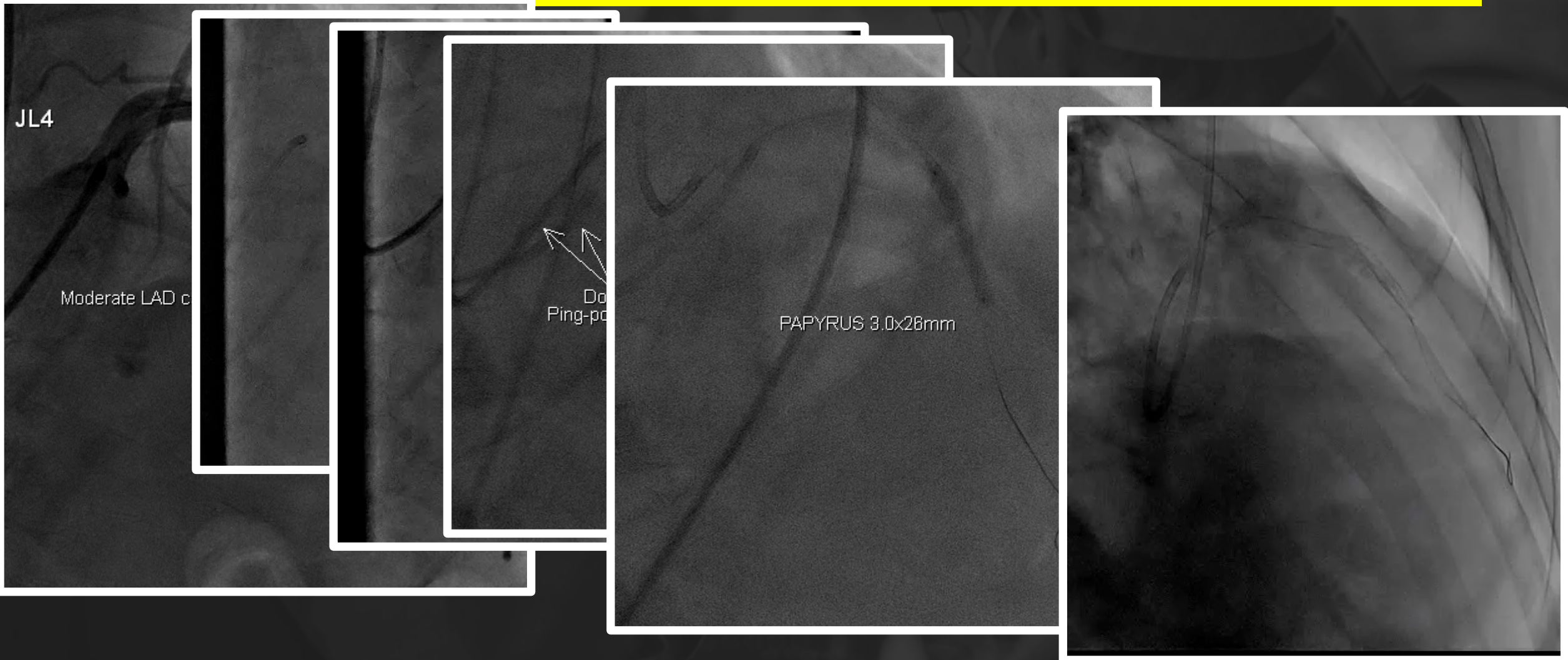
Les effractions coronaires :

Matériau d'embolisation et fermeture



Les effractions coronaires :

Cas clinique femeture stent couvert



Les effractions coronaires :

Kit de drainage péricardique

- Indispensable dans toutes les salles: CTO+++
- technique bien codifiée.
- Tout cardiologue interventionnel doit impérativement savoir drainer le péricarde en urgence++.
- Guidage ETT/ rayon X
- intégrer les fellows dans les ponctions non urgentes.

