19 - 21 OCTOBRE | 2022

XXIVE CONGRÈS FRANCOPHONE DE CARDIOLOGIE INTERVENTIONNELLE

CFCI PARIS

HÔTEL MÉRIDIEN ÉTOILE

Atelier

Cathéters Guide d'extension

Laurent Drogoul
Nice

Kantys | Polyclinique Saint George

CENTRE CARDIO THORACIQUE DE MONACO

Cédric Delhaye
Lille

CHU LILLE

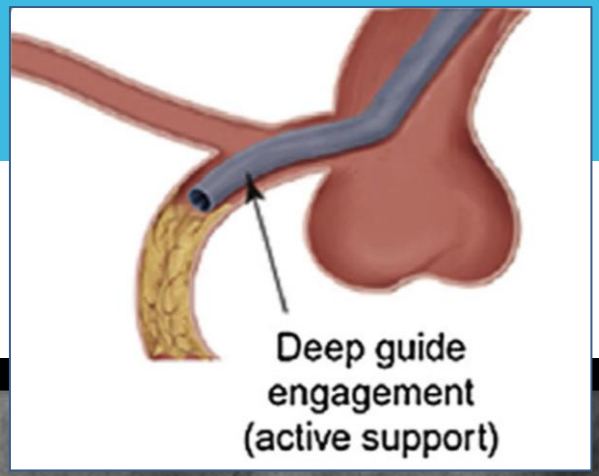
Pour traiter ce genre de lésion…

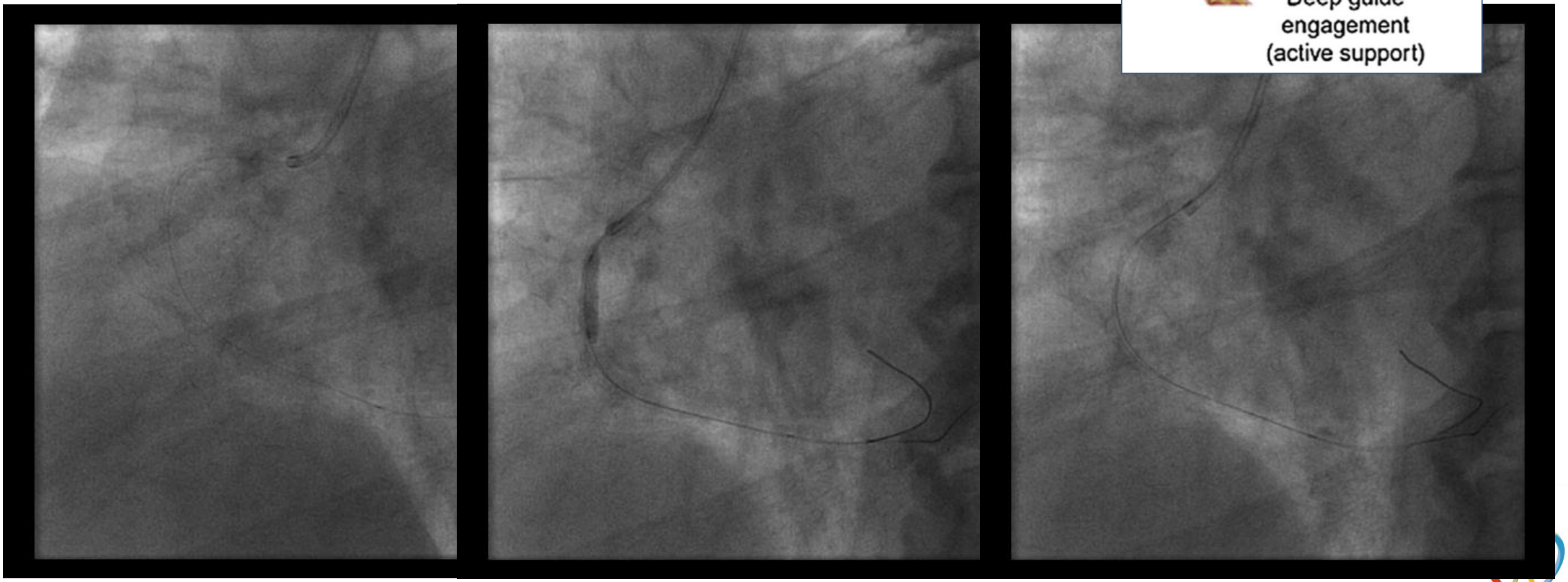
Tortuosités ++
Calcifications ++
Lésion(s) diffuse(s)

Il faut du support

1. Augmenter le support

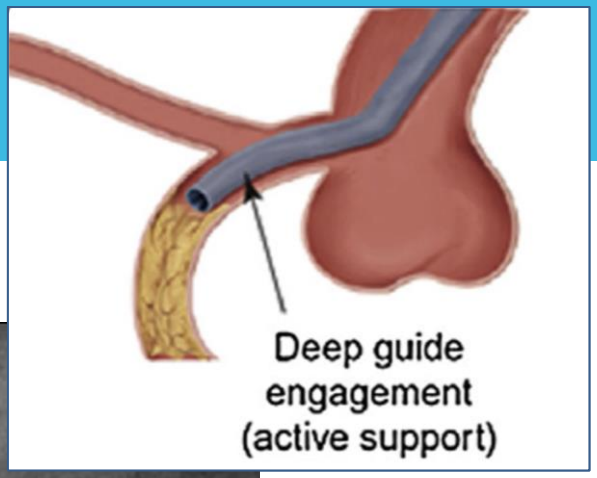
Deep intubation

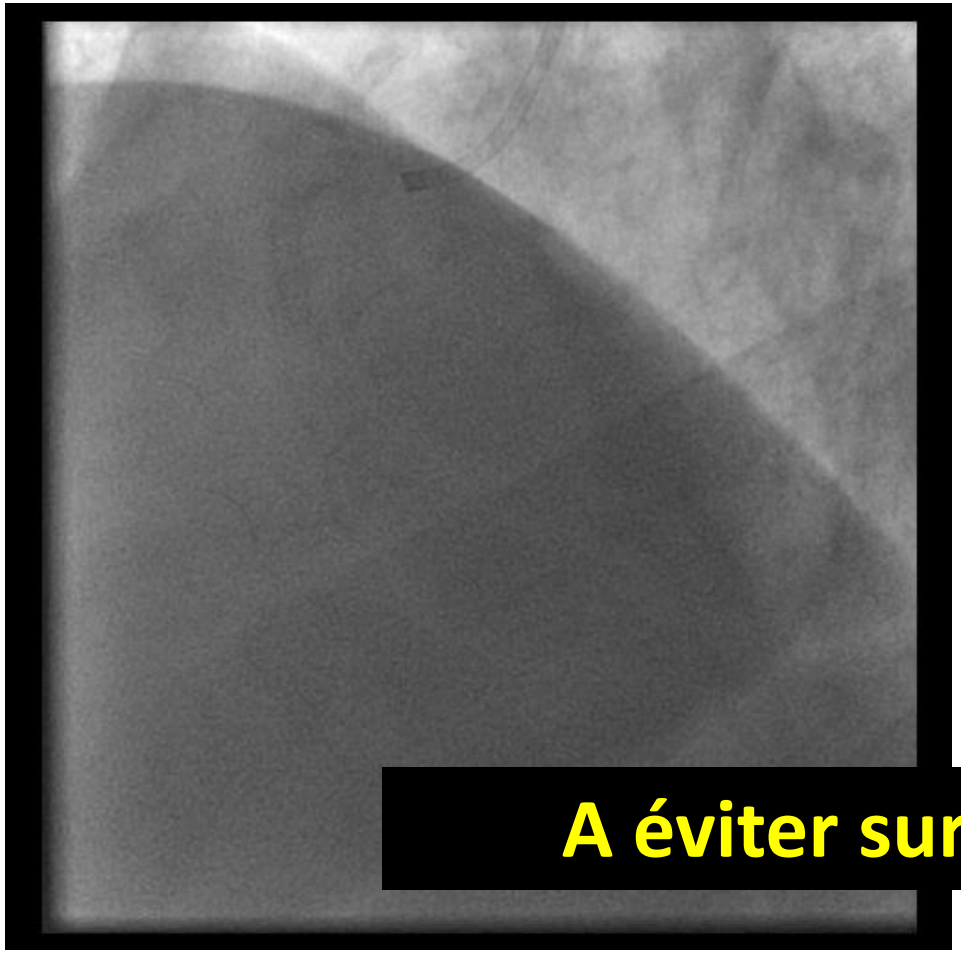


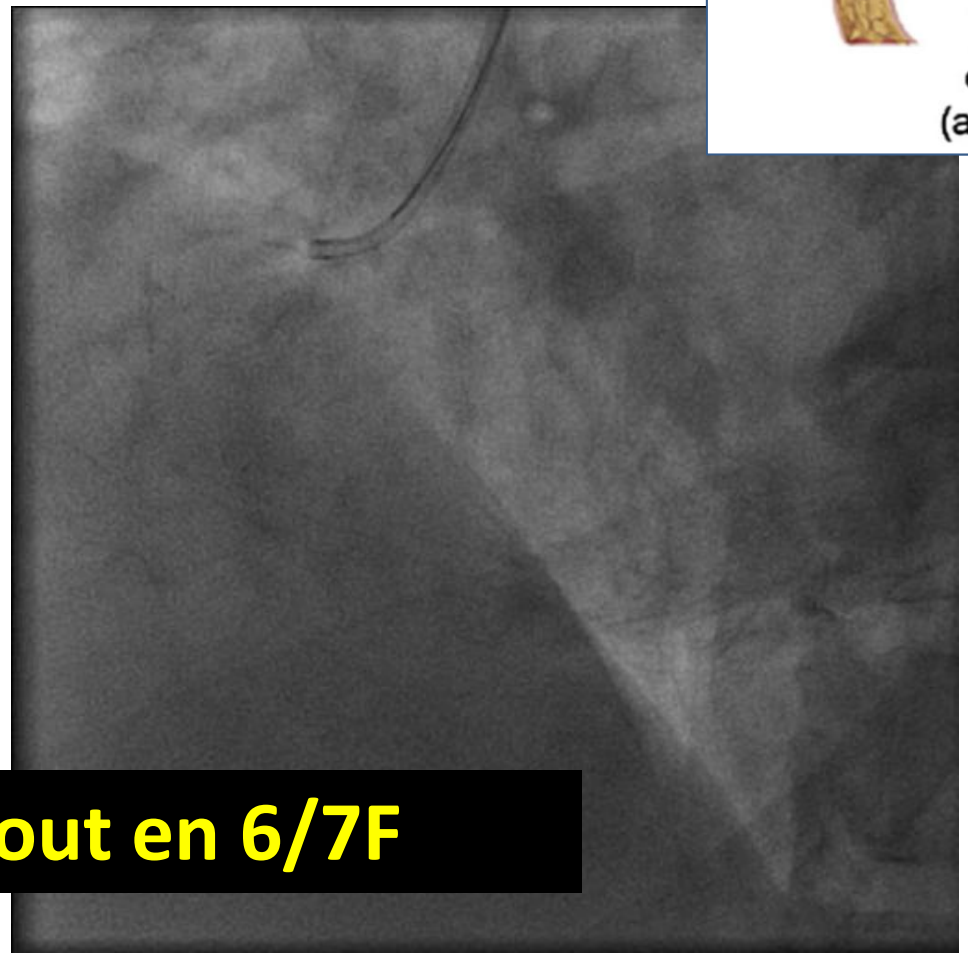


1. Augmenter le support

Deep intubation







A éviter surtout en 6/7F

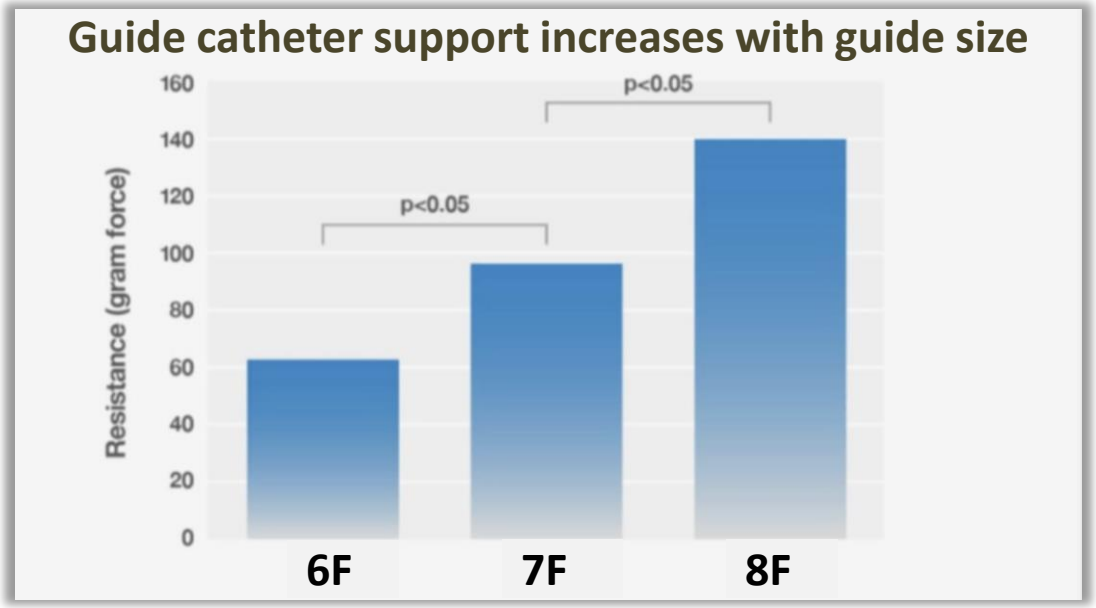
1. Augmenter le support

If you want peace, prepare for war!!

Accès Fémoral +/- long désilet

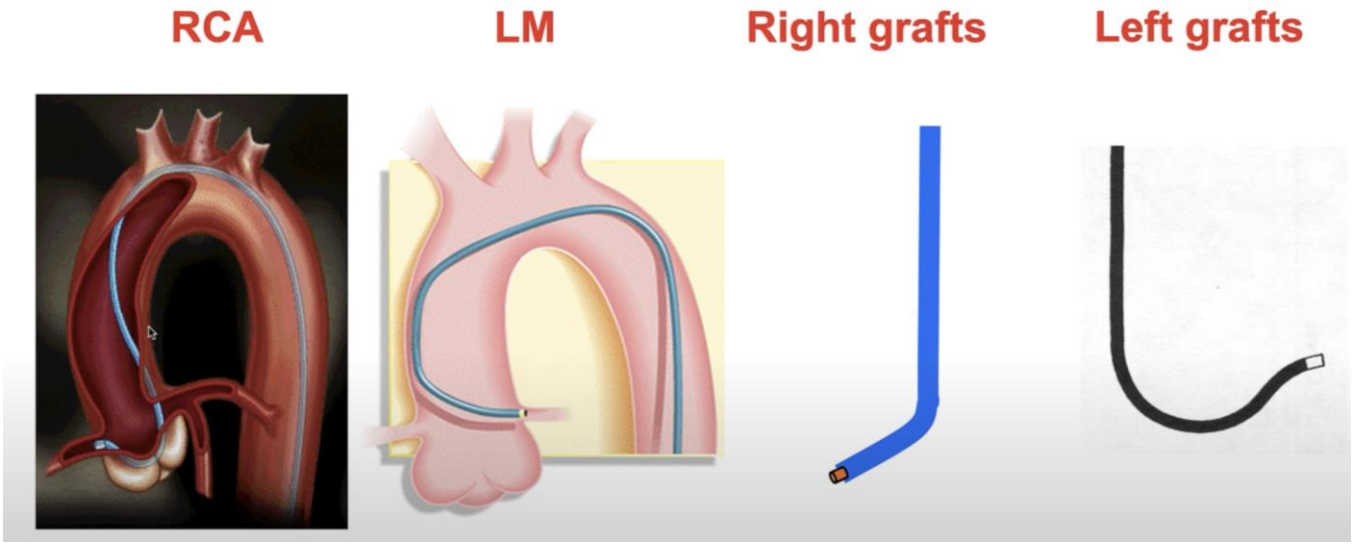
Désilet radial « slender »

Cathéter guide de gros calibre (7F)



Ikari Y, J Invasive Cardiol 2005

Guide: Supportive shape



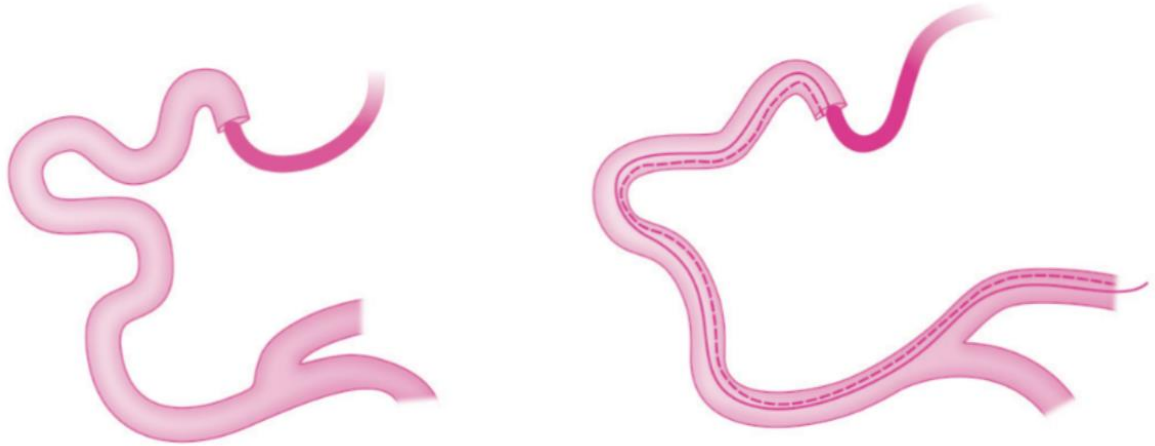
Brilakis, Manual of Percutaneous Coronary Interventions 2020

1. Augmenter le support

Bien choisir son (ses) guide(s) !

Guide rigide type « extra support » (échange via microcathéter après descente d'un hydrophile)

Buddy Wire ++++



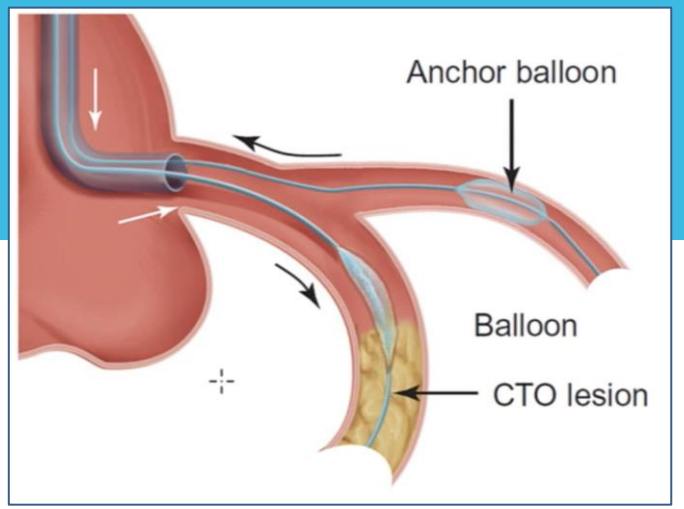
Buddy wire (usually extra-support) makes the artery straighten

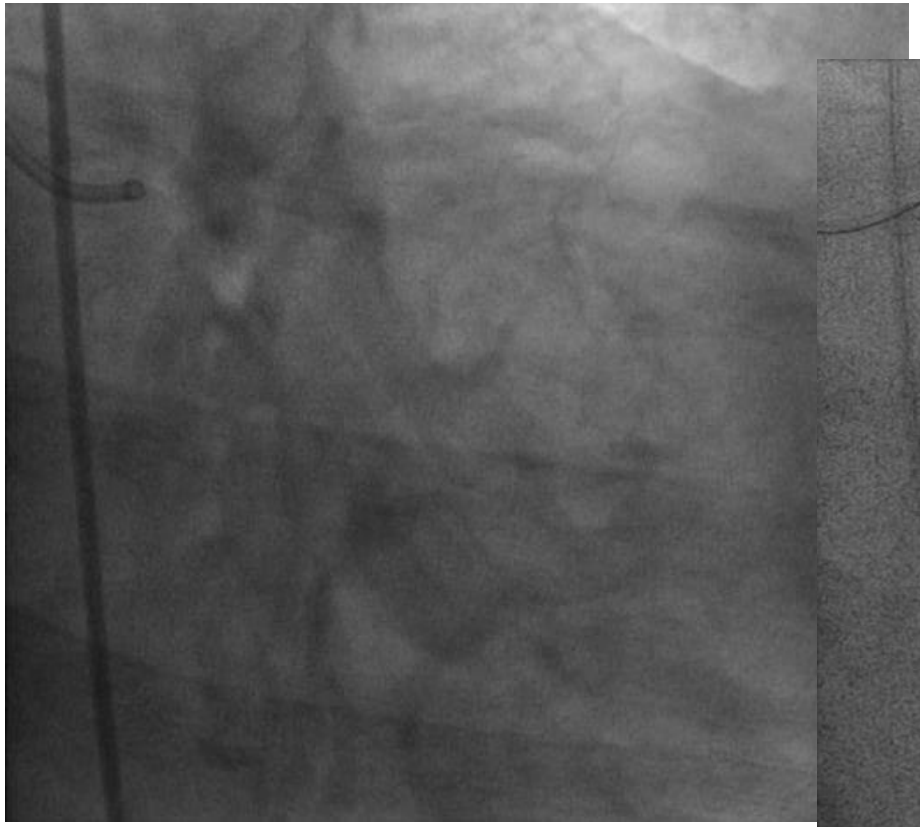
Techniques plus anecdotiques utilisant les guides : Jailed Buddy Wire, Balloon Deflation Technique, Anchor Balloon

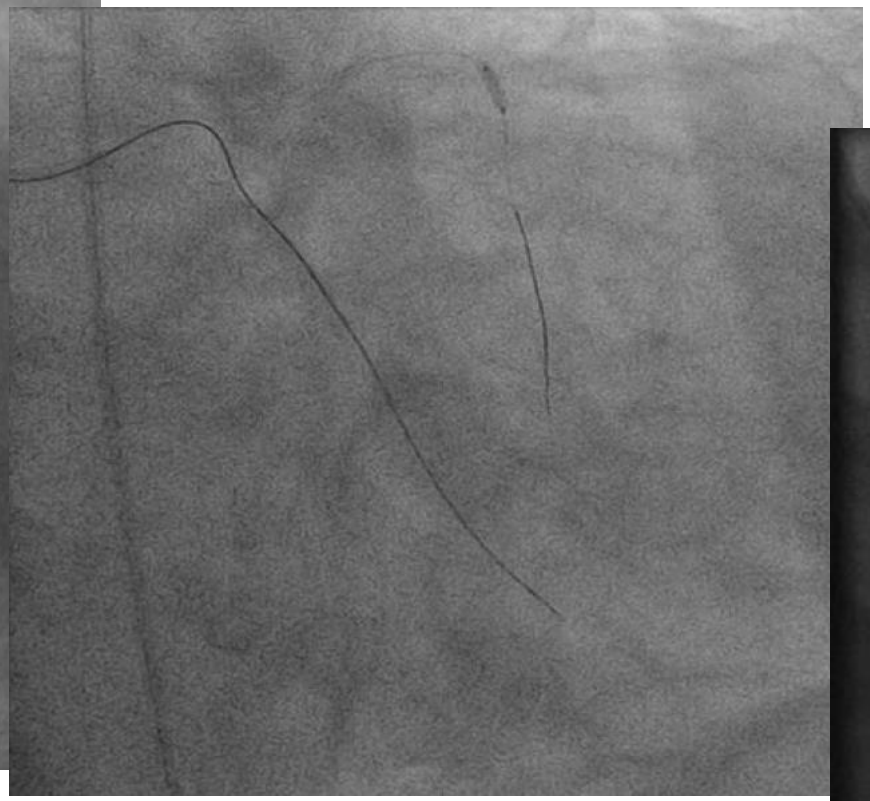
Ray S, Tips & Tricks in Interventional Cardiology 2017

1. Augmenter le support

Side Branch Anchor Technique







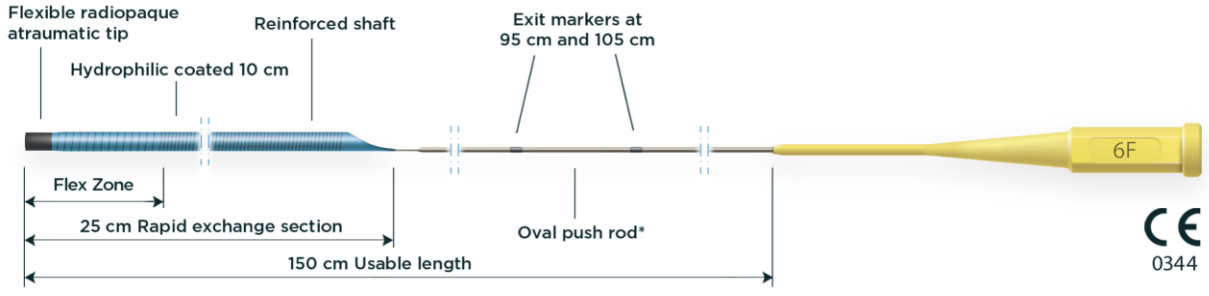
Indications dans les lésions /CTO:

- **Proches de l'ostium aortique**
- **Angle droit (ou très prononcé) avant la lésion**

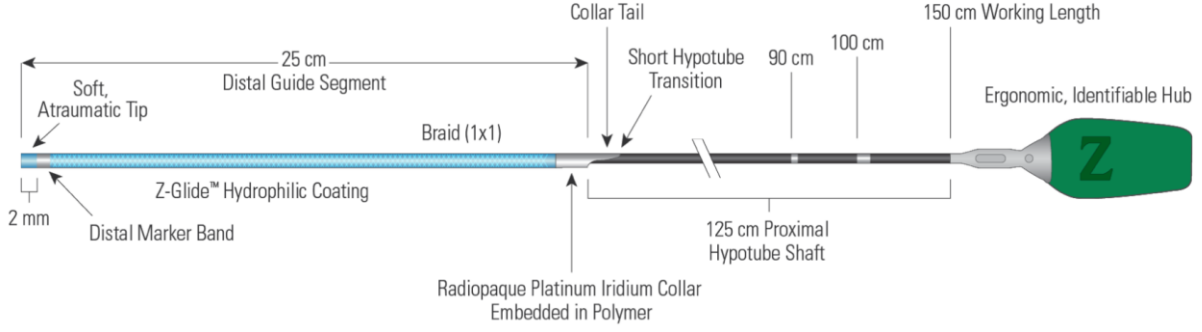
1. Augmenter le support

Cathéters guide d'extension

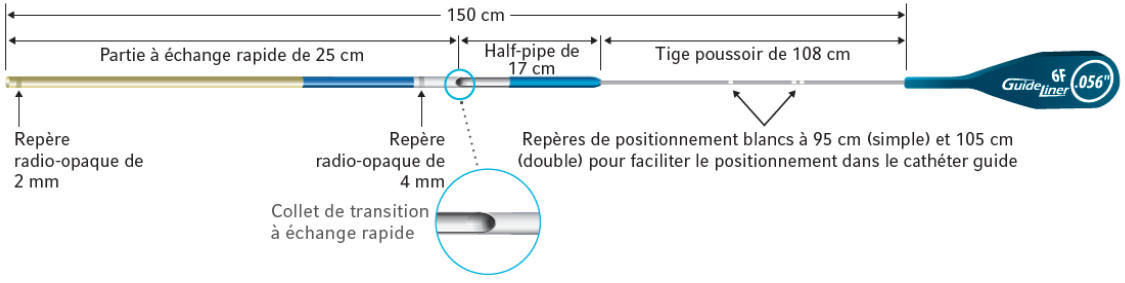
GUIDION – IMDS / Biotronik



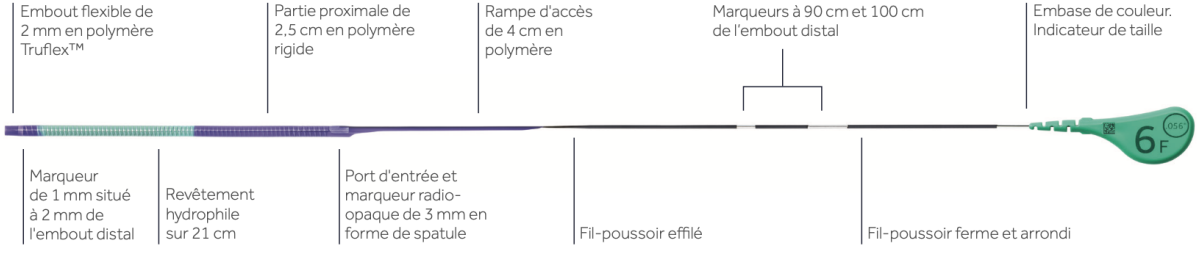
GUIDEZILLA II – Boston Scientific



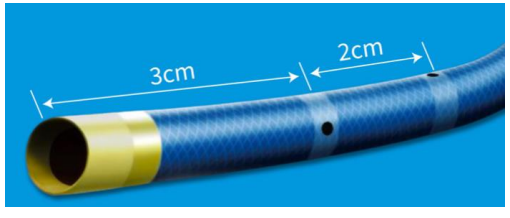
GUIDELINER v3 - Vascular Solution



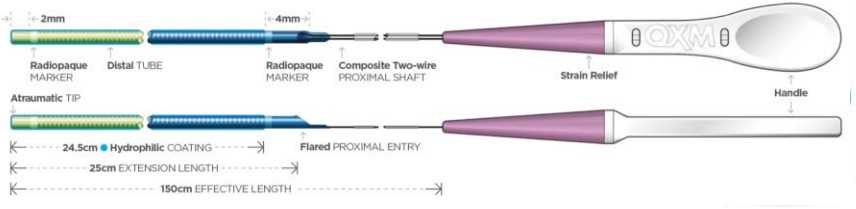
TELESCOPE - Medtronic

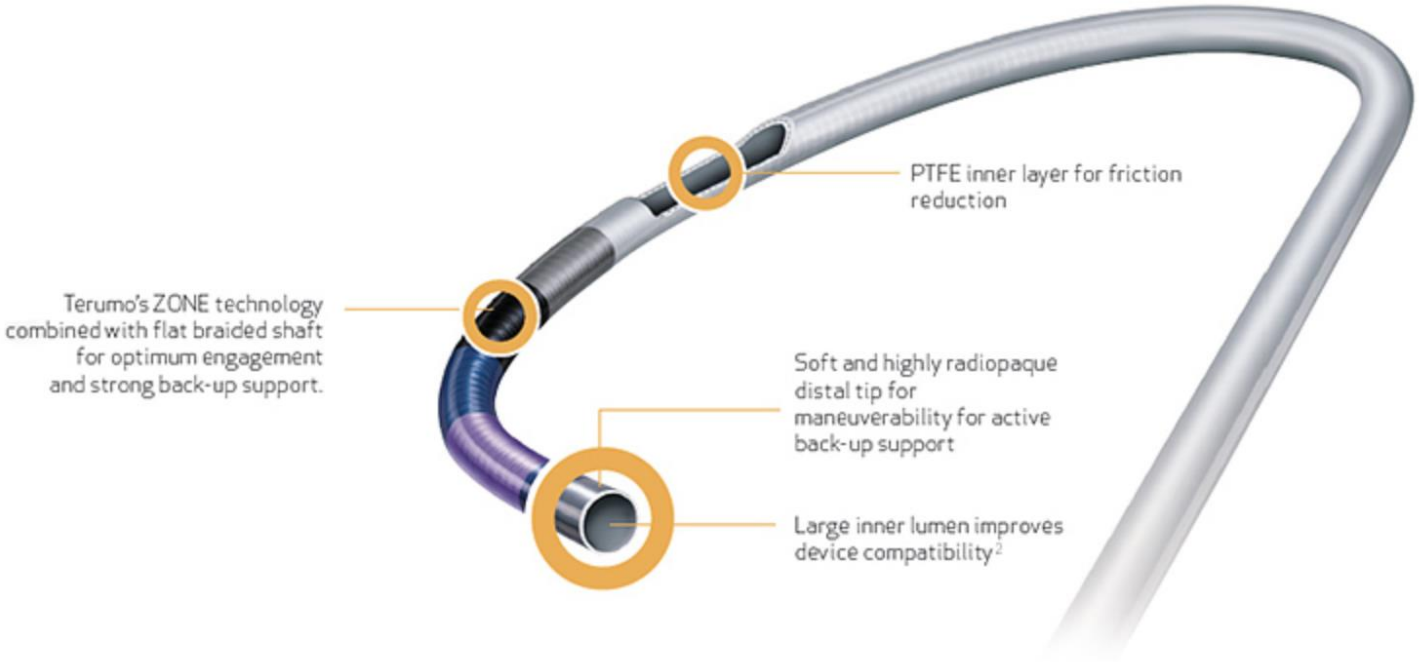


Expressman – APTMedical

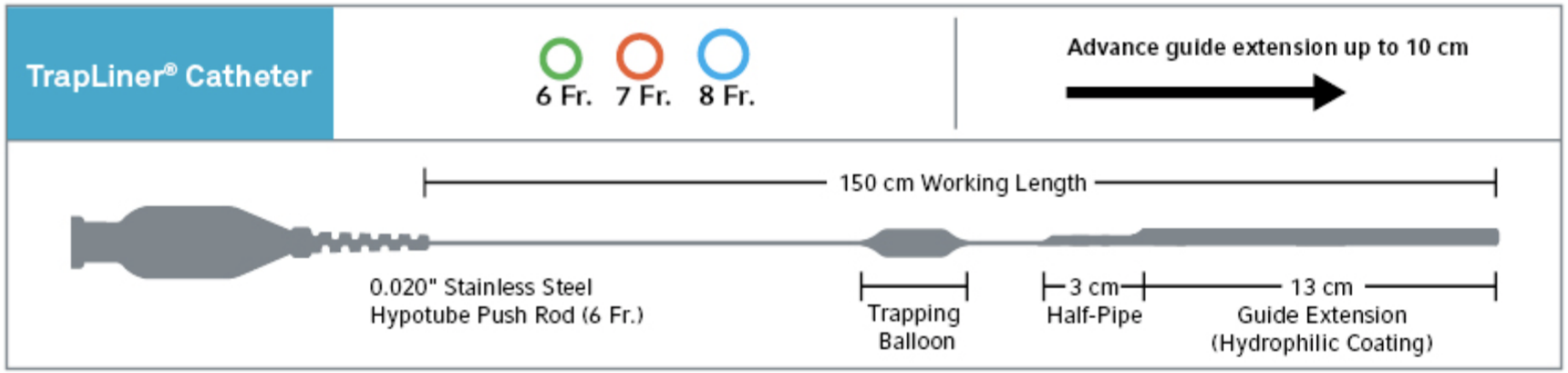


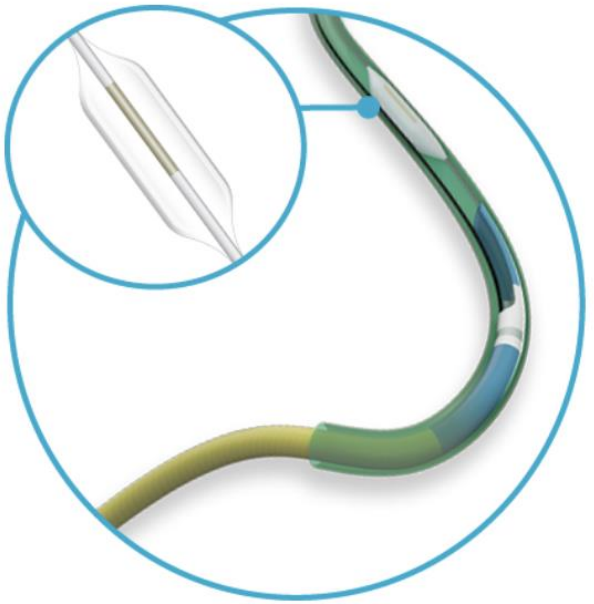
Boosting Catheter - Translumina





120 cm - Heartrail 5Fr straight, for 5Fr guiding catheter in 6Fr


TrapLiner® Catheter
6 Fr.
7 Fr.
8 Fr.
Advance guide extension up to 10 cm
150 cm Working Length
0.020" Stainless Steel
Hypotube Push Rod (6 Fr.)
Trapping
Balloon
3 cm
Half-Pipe
13 cm
Guide Extension
(Hydrophilic Coating)

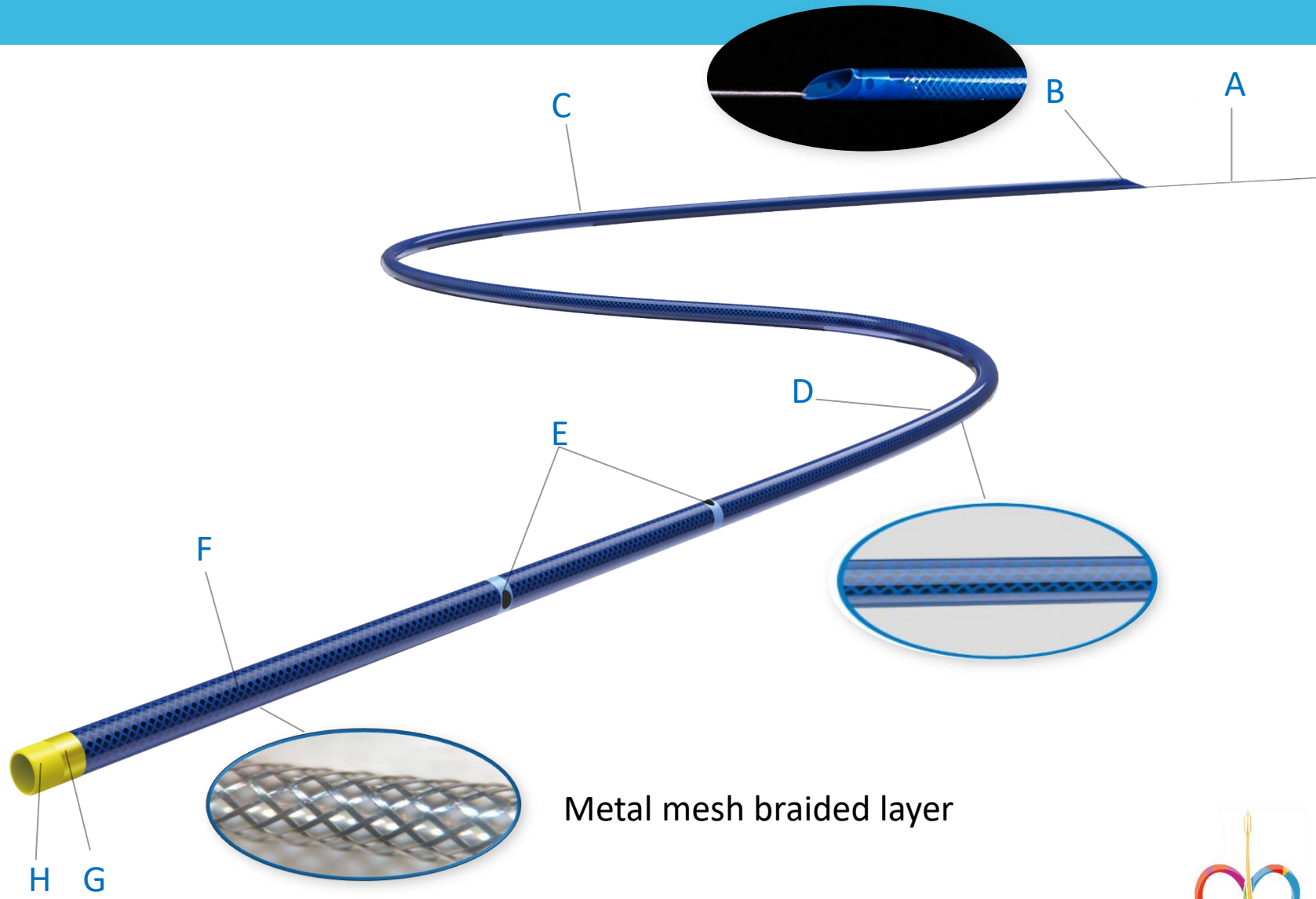


STRUCTURE

Expressman™

APTMedical

- A: 115cm Nitinol Push Rod
- B: Entry Port
- C: 35cm Exchange Section
- D: 35cm Hydrophilic Coating
- E: Side Holes
- F: Metal Mesh Braiding
- G: Radiopaque Marker
- H: Soft & Atraumatic Tip



Metal mesh braided layer

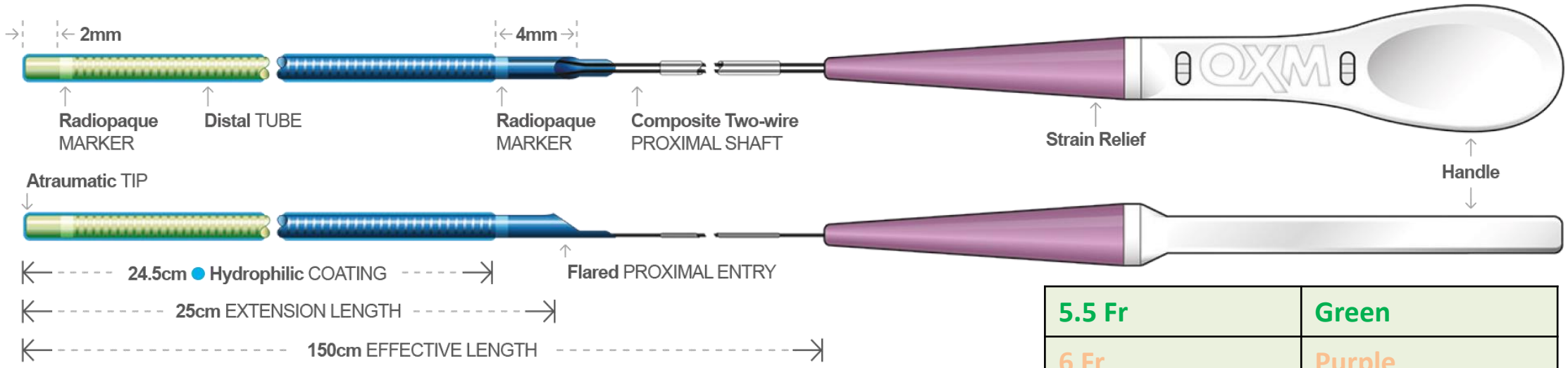
Boosting Catheter

translumina
LIMITLESS POSSIBILITIES

Caractéristiques

INNER LUMEN
0.052", 0.057", 0.063", 0.072"

GUIDING CATHETER COMPATIBILITY
5.5Fr, 6Fr, 7Fr, 8Fr



5.5 Fr	Green
6 Fr	Purple
7 Fr	Blue
8 Fr	Yellow

OXMédical

Veuillez consulter le Mode d'Emploi pour une liste complète des indications, contre-indications, avertissements et précautions.

COMPARISON

	APT Expressman	Boston Scientific Guidezilla II	Medtronic Telescope	Teleflex GuideLinerV3	Boston Scientific Guidezilla
French	4F, 5F, 5.5F, 6F, 6.5F, 7F, 7.5F	6F, 6F(Long), 7F, 8F	6F, 7F	5F, 5.5F, 6F, 7F, 8F	6F
6F ID	0.056" (1.42mm)	0.057" (1.45mm)	0.056" (1.42mm)	0.056" (1.42mm)	0.057" (1.45mm)
6F OD	0.066" (1.68mm)	0.067”(1.7mm)	0.067" (1.70mm)	0.067" (1.70mm)	0.066" (1.68mm)
Push Rod	Nitinol	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel
Extension Length	35cm	25cm / 40cm	25cm	25cm	25cm
Exchange Section	Braided	Braided	Coil	Coil	Braided
Coating	Hydro.	Hydro.	Hydro.	Silicon Coating	Hydro.
Side holes	4 Side holes	—	—	—	—

French Size (F)	GEC Name	I.D. (in)	O.D. (in)	Required GC I.D. (in)
5.5	GuideLiner™* V3 GEC[6]	0.051	0.063	6 F ≥ 0.066
6	Telescope™ GEC	0.056	0.067	6 F ≥ 0.070
6	GuideLiner™* V3 GEC[6]	0.056	0.067	6 F ≥ 0.070
6	Guidezilla™* II GEC[7]	0.057	0.067	6 F ≥ 0.070
7	Telescope™ GEC	0.062	0.075	7 F ≥ 0.078
7	GuideLiner™* V3 GEC[6]	0.062	0.075	7 F ≥ 0.078
7	Guidezilla™* II GEC[7]	0.063	0.073	7 F ≥ 0.078

Kt guide :
Launcher 5F: I.D. 0.058
Laucher 6F I.D. 0.071

French Size (F)	GEC Name	I.D. (in)	O.D. (in)	Required GC I.D. (in)
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Kt guide :
Launcher 5F: I.D. 0.058
Launcher 6F I.D. 0.071

ROTABLATOR™
Rotational Atherectomy System Reference Guide

Guide Catheter Selection & Sizing

Guide sizes are based on larger lumen catheters.

Burr (mm)	Diameter (Inches)	Minimum Recommended Guide Catheter Internal Diameter (Inches)	Recommended Guide Catheter (French)*†
1.25	0.049	0.060‡	6.0
1.50	0.059	0.063	6.0
1.75	0.069	0.073	7.0
2.00	0.079	0.083	8.0
2.15	0.085	0.089	8.0
2.25	0.089	0.093	9.0
2.38	0.094	0.098	9.0
2.50	0.098	0.102	10.0

* Inside guide catheter diameter and french size may differ among manufacturers. Ensure guide is compatible with the largest burr intended to be used.
† Sheath size is the determinant of the minimum ID on the 1.25 mm burr.
‡ Add 0.004" to burr diameter to calculate minimum ID needed

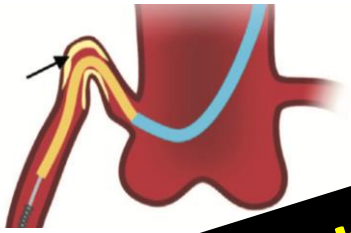
COMPATABILITY

Expressman™

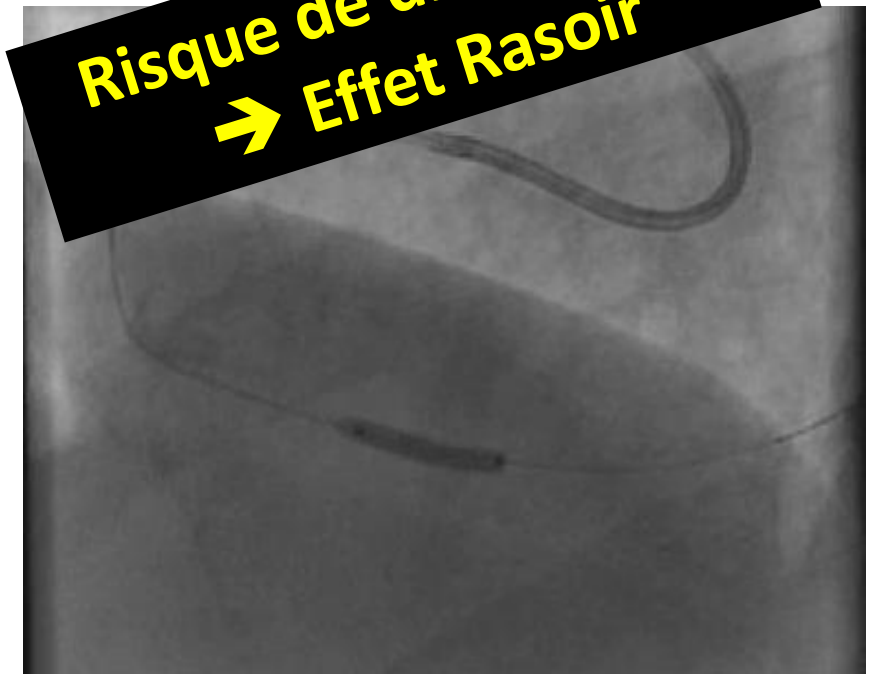
	5F (I.D.:0.056”)	6F(I.D.:0.066”)
Balloon Catheter	≤5mm	all
Stent	≤4.0mm (not for all stents)	all
Rotation	1.25mm （Requires pre-installation）	1.5mm （Requires pre-installation）
IVUS	Eagle Eye & OptiCross	Eagle Eye & OptiCross
Cutting Balloon	≤2.75mm	all
Guiding Catheter	6F （I.D.≥0.070”）	7F （I.D.≥0.080”）

Comment le manipuler ?

1. Direct advancement



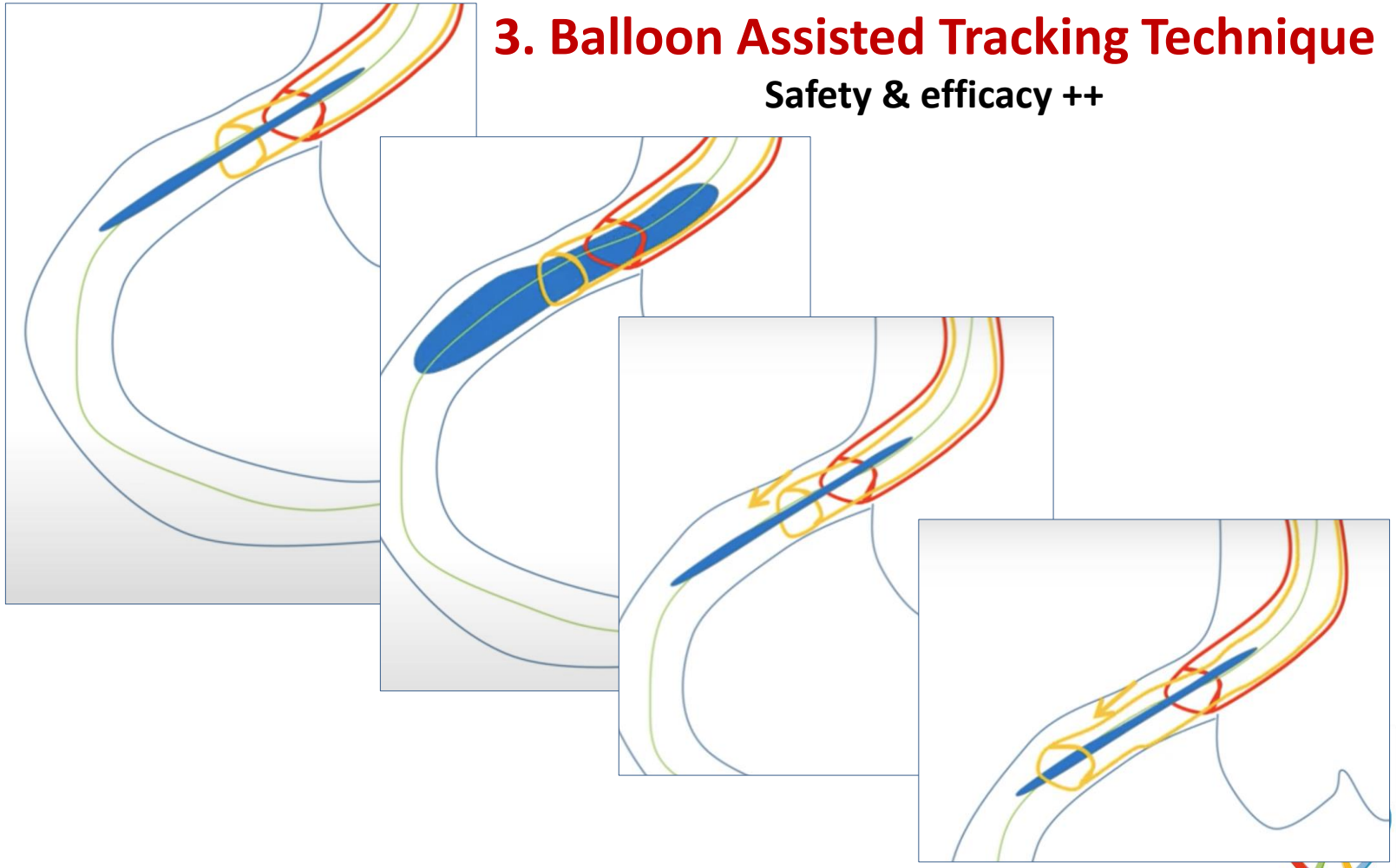
2. Distal



Risque de dissection !
➔ Effet Rasoir

3. Balloon Assisted Tracking Technique

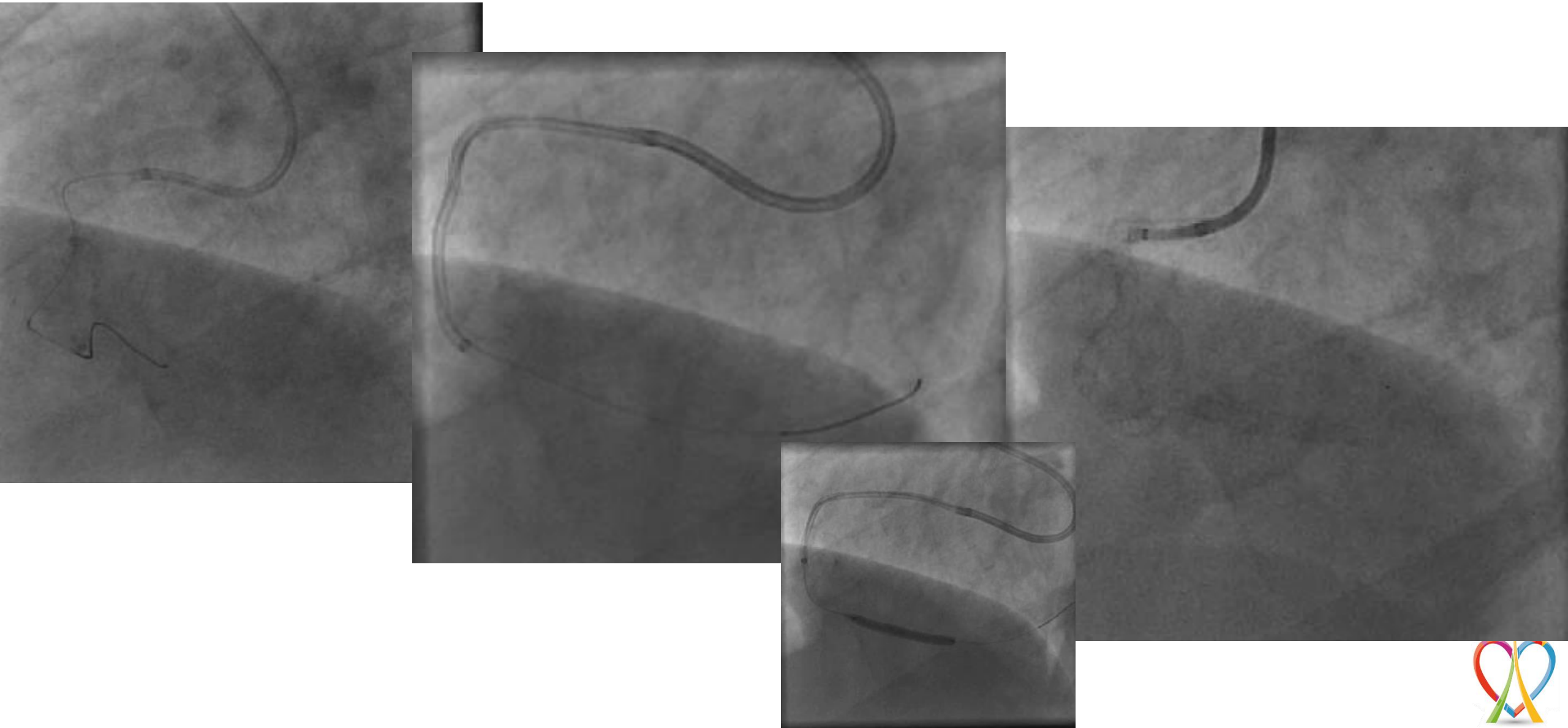
Safety & efficacy ++



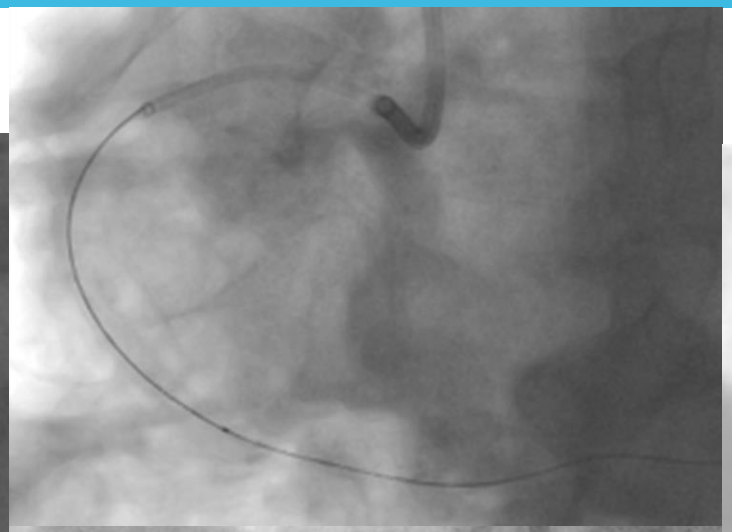
Balloon Assisted Tracking Technique

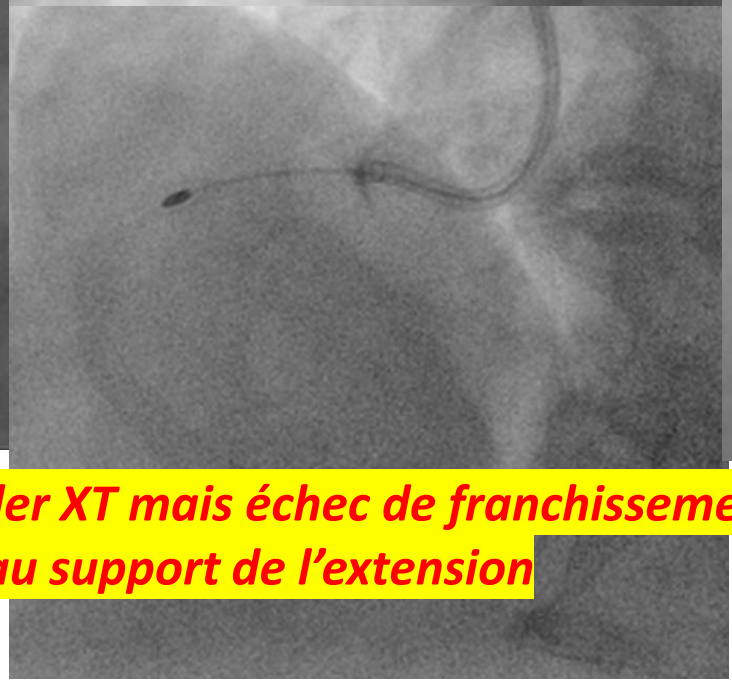
Source: Dr. Hanratty’s CTO Deck (MC-006244 Rev 0, DCO-041309)

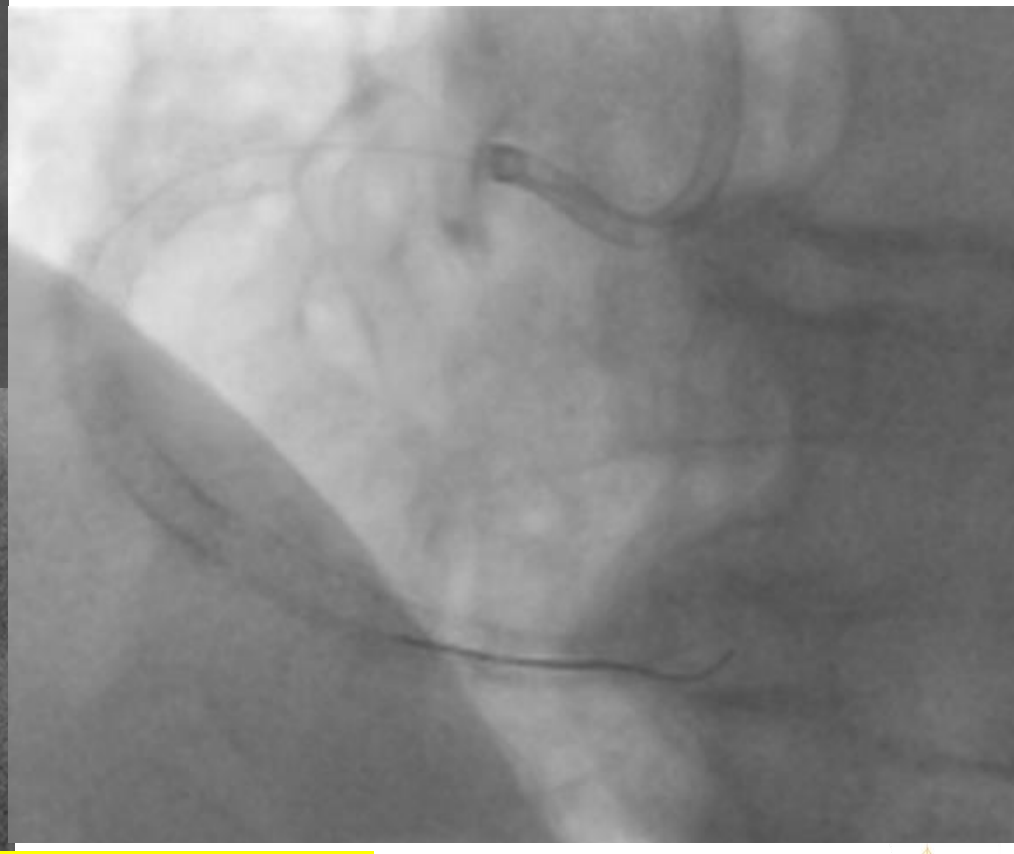
Augmenter le support (atteindre une lésion distale)



Augmenter le support (franchir une lésion complexe)

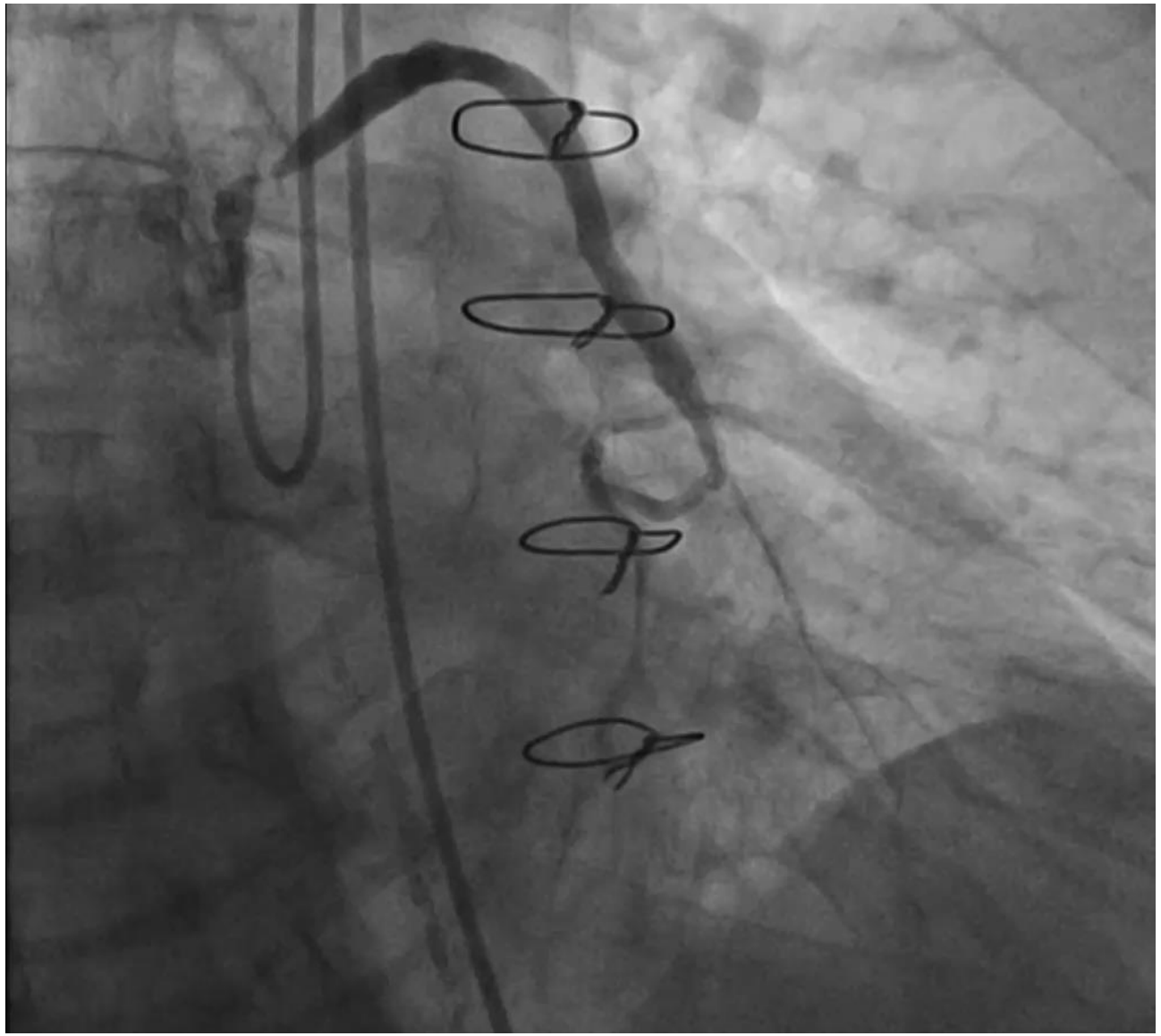




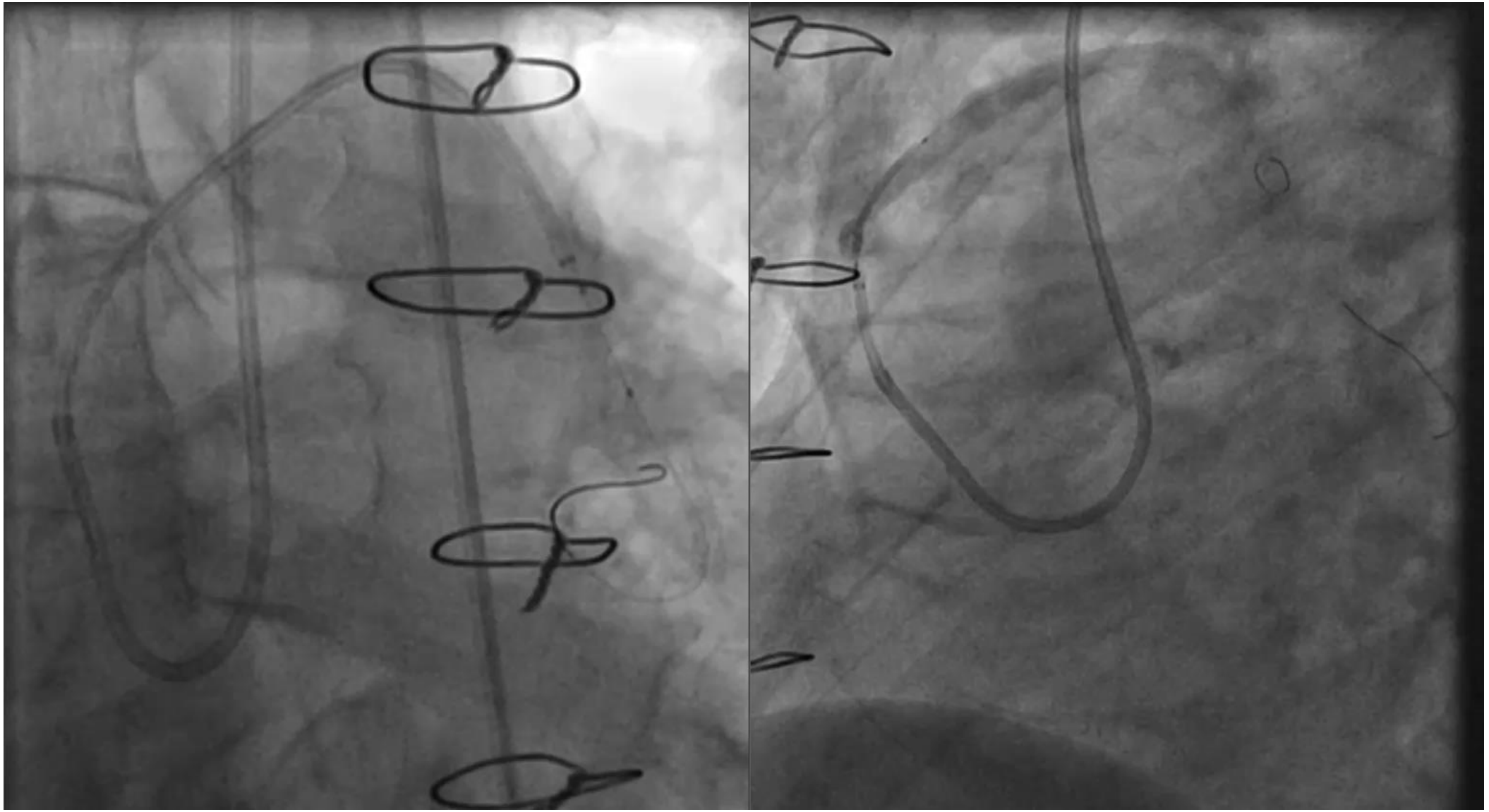


Lésion franchie uniquement avec Filder XT mais échec de franchissement du microcath
Franchissement du microcath grâce au support de l'extension
Echange pour guide de rota

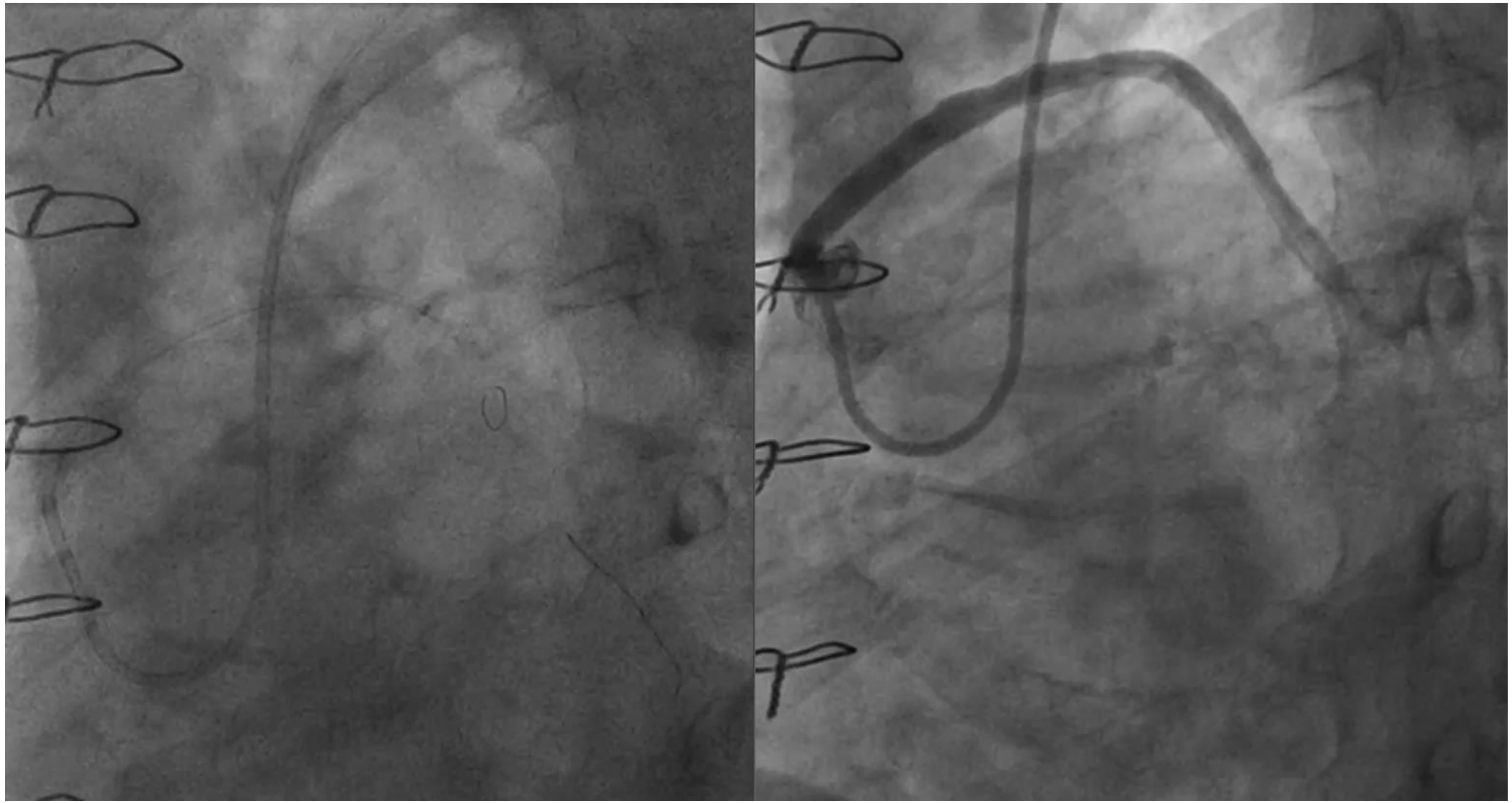
Augmenter le support (lésions de pontage)



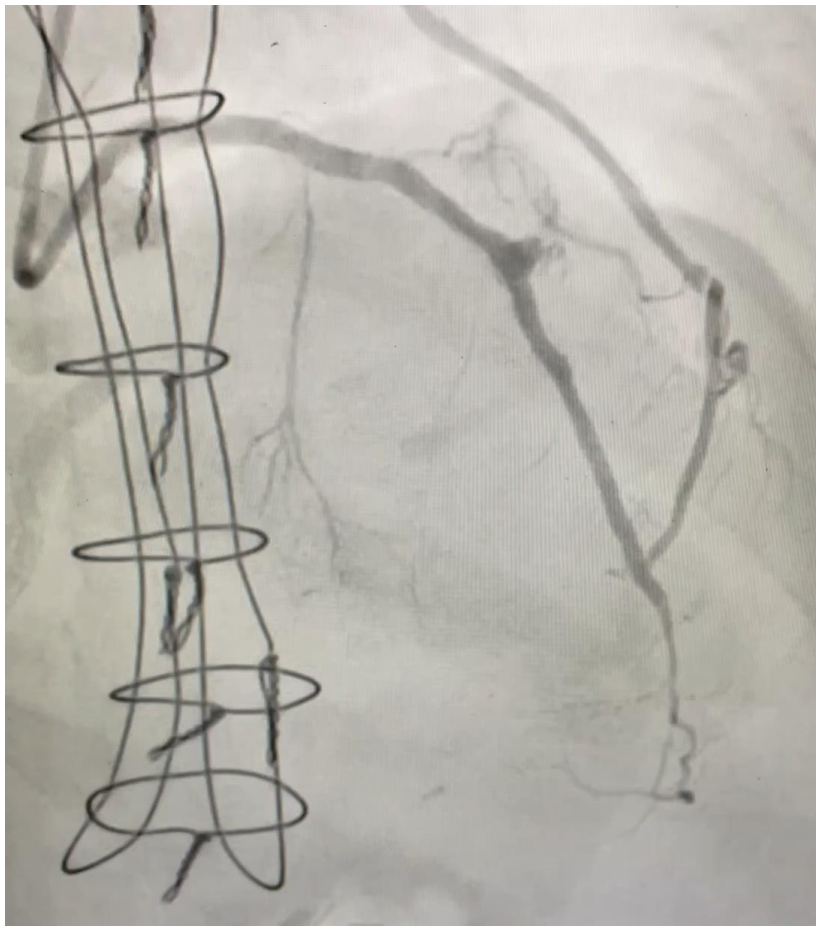
Augmenter le support (lésions de pontage)

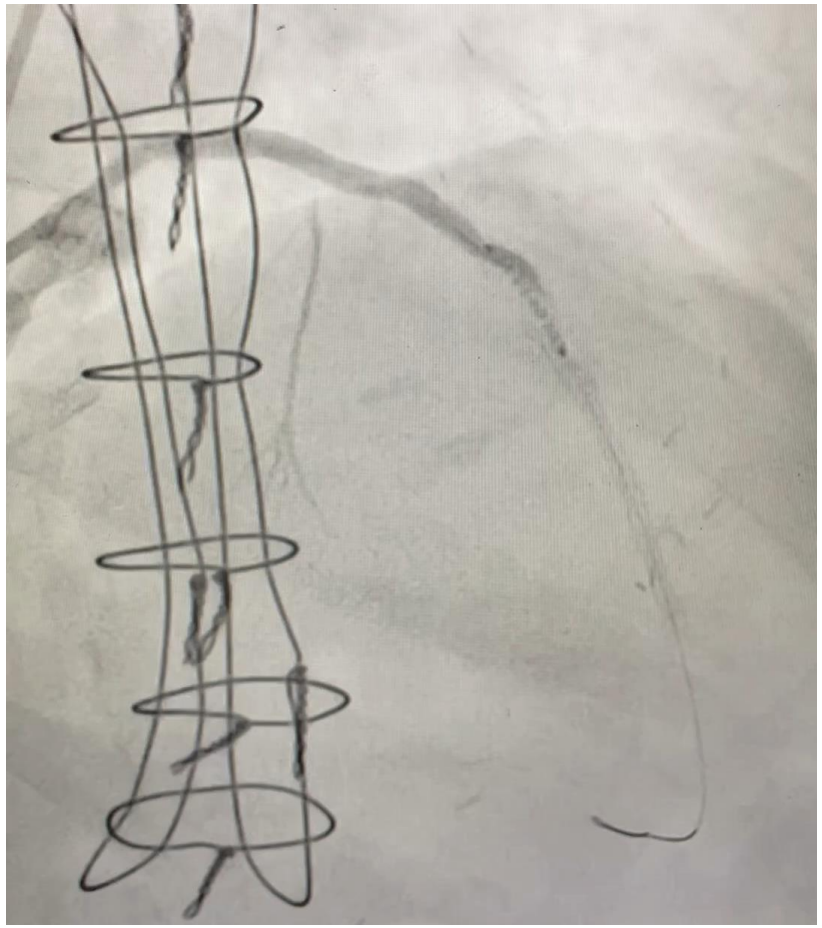


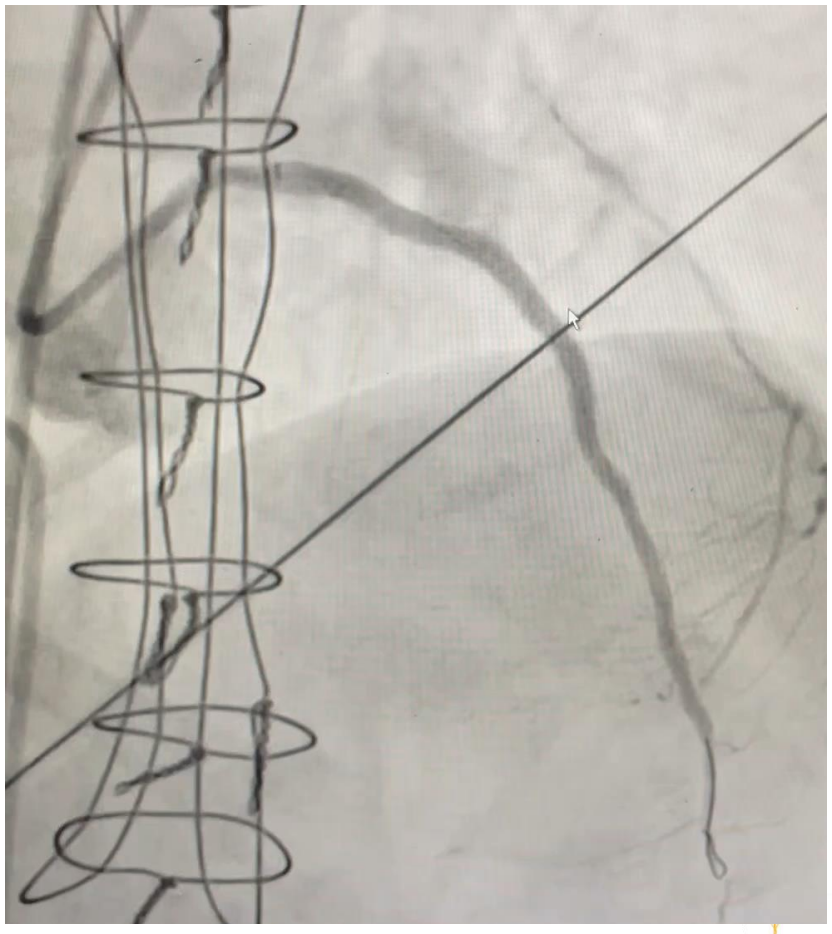
Augmenter le support (lésions de pontage)



Augmenter le support (delivrer un stent couvert)





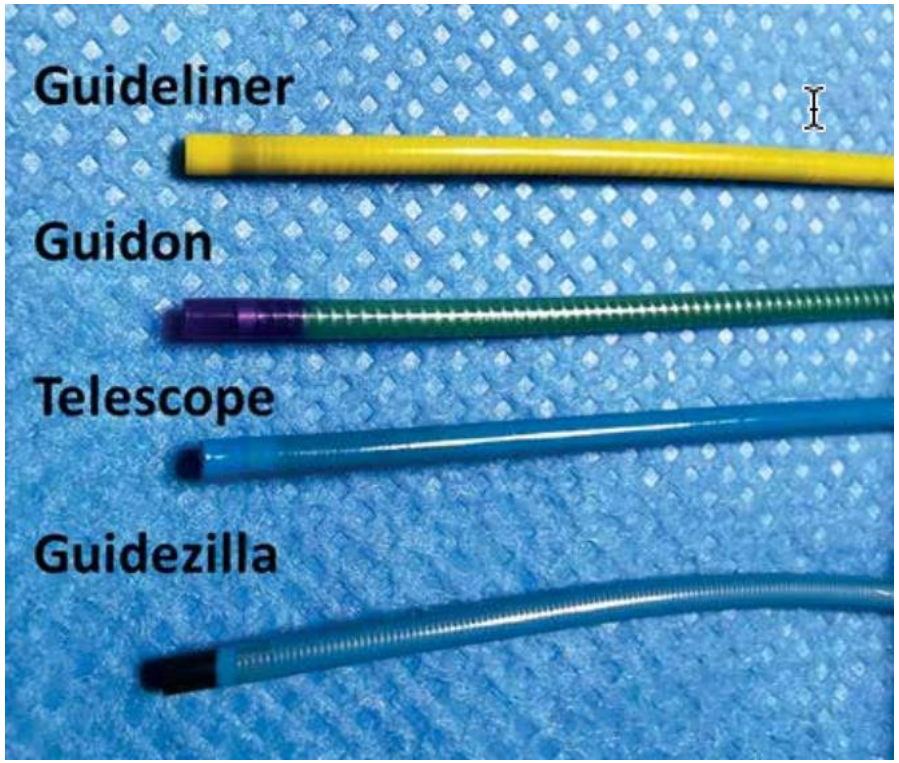


Extension de cathéter guide & Rota

Rota: faciliter la délivrance de la fraise

Guiding catheter extension compatibility for high speed rotational atherectomy

Tomasz Pawłowski, Paweł Modzelewski, Michał Stachura, Zbigniew Śliwiński, Robert J. Gil



Guiding extension catheter inner sizes as reported by manufacturers

Guiding extension name	Inner size [mm]
Telescope 6 Fr	1.42
Telescope 7 Fr	1.57
Guideliner 6 Fr	1.42
Guideliner 7 Fr	1.57
Guidon 6 Fr	1.42
Guidon 7 Fr	1.57
Guidezilla 6 Fr	1.45
Guidezilla 7 Fr	1.60

Adv Interv Cardiol 2021; 17, 2 (64): 210–213

Rota: faciliter la délivrance de la fraise

Guiding catheter extension compatibility for high speed rotational atherectomy

Tomasz Pawłowski, Paweł Modzelewski, Michał Stachura, Zbigniew Śliwiński, Robert J. Gil

Utilisation Off-label

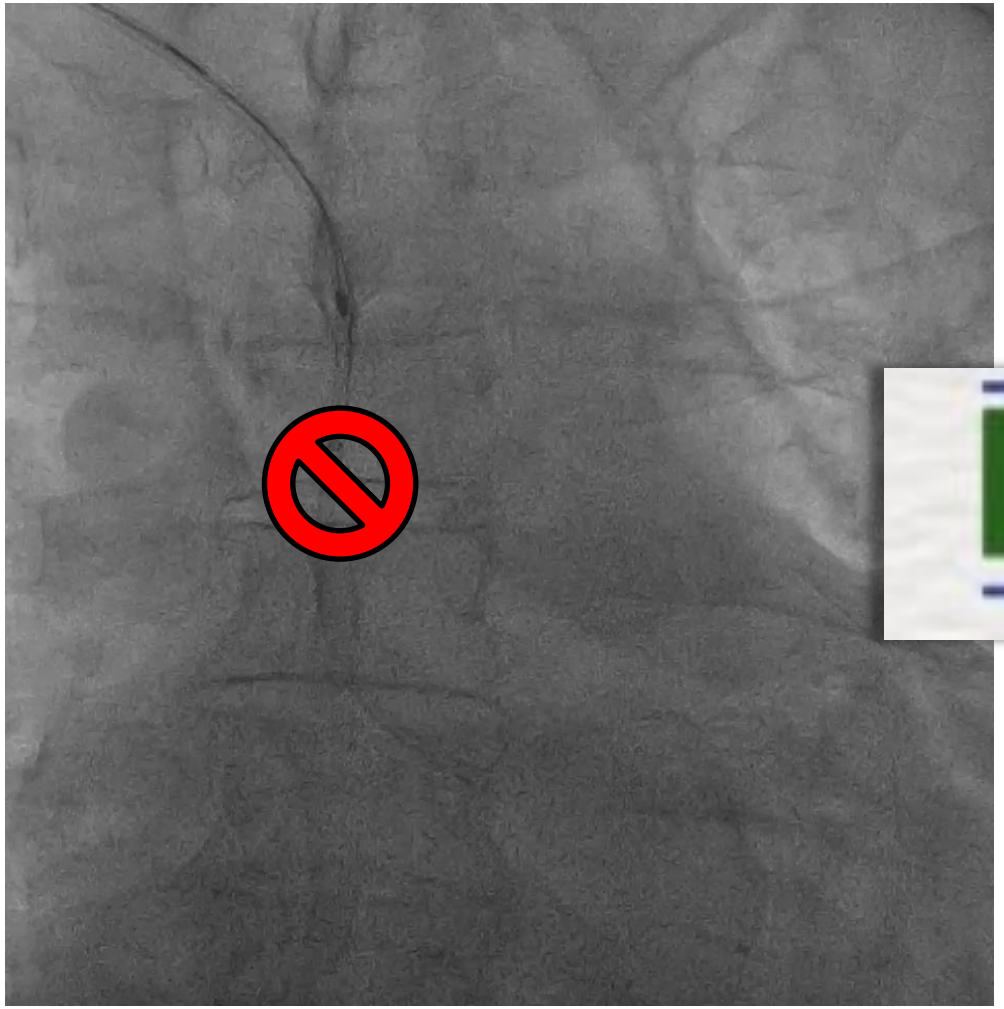
Table II. Practical recommendations regarding guiding catheter size and available extensions

Burr size	6 Fr catheter	7 Fr catheter
1.25 mm	Guidezilla 1.45mm	Telescope Guideliner 1.60mm Guidon Guidezilla
	Guideliner* 1.42mm Guidon* 1.42mm	
1.50 mm	None	Telescope Guideliner 1.57mm Guidon 1.57mm Guidezilla

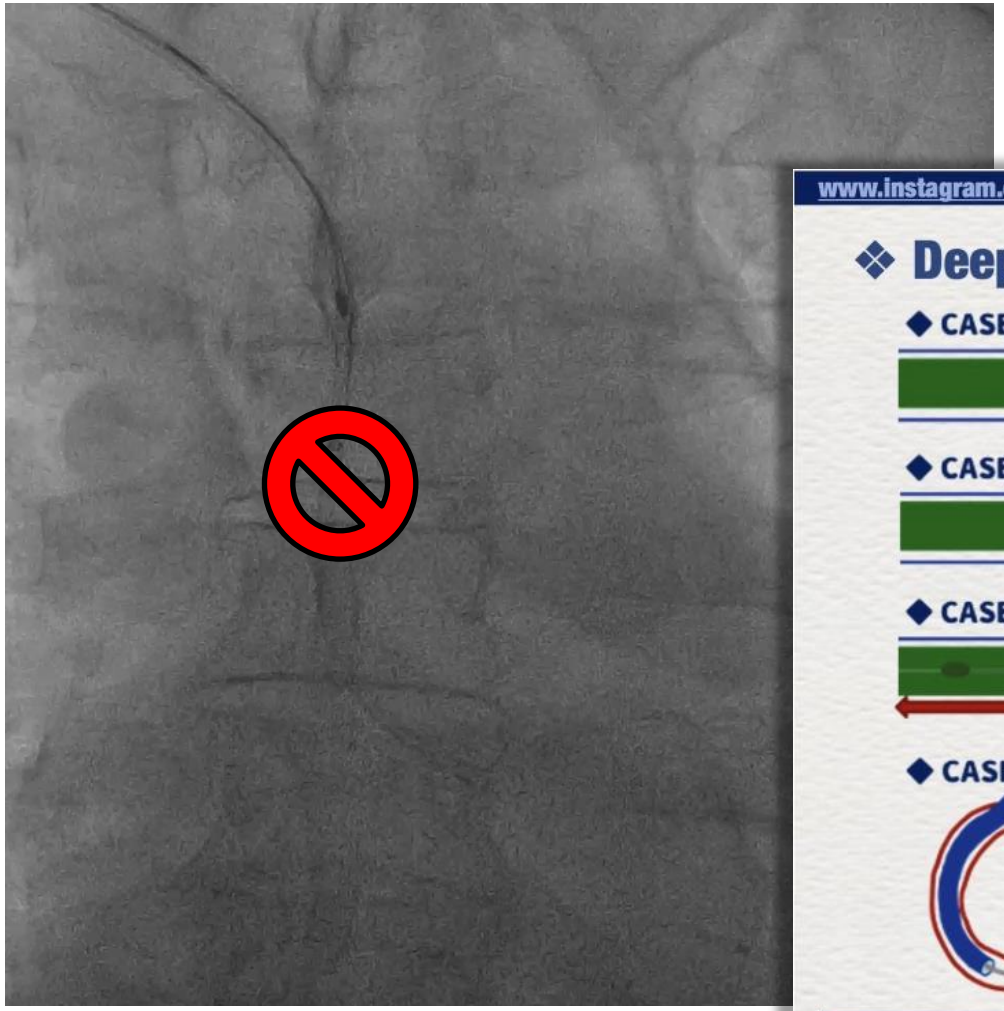
**Forward and backward resistance during movement.*

Adv Interv Cardiol 2021; 17, 2 (64): 210–213

Parfois pas si simple…



Parfois pas si simple…



Realization of Intervention Strategy Based on Leading-Edge Knowledge and Skill for CTO and Calcified Lesion

❖ Deep seating or Extension-GC ?

◆ CASE 1a

◆ CASE 1b

◆ CASE 2

◆ CASE 3

➢ An anchor balloon technique is available to advance an extension catheter. **Only 1.25mm burr can be used.** 1.5mm burr occasionally goes into an extension catheter. However, huge resistances is occurred, so 1.5mm burr is not recommended in this situation (1a, 1b). Even 1.25mm burr cannot be often advanced into an extension catheter, because **a rota wire get twisted an extension catheter up.** (1b).

➢ A burr is set into an extension catheter outside of a guiding catheter. Then an extension catheter and a burr are advanced into the guiding catheter at the same time. Therefore, an anchor balloon technique cannot be used to advance an extension catheter (2).

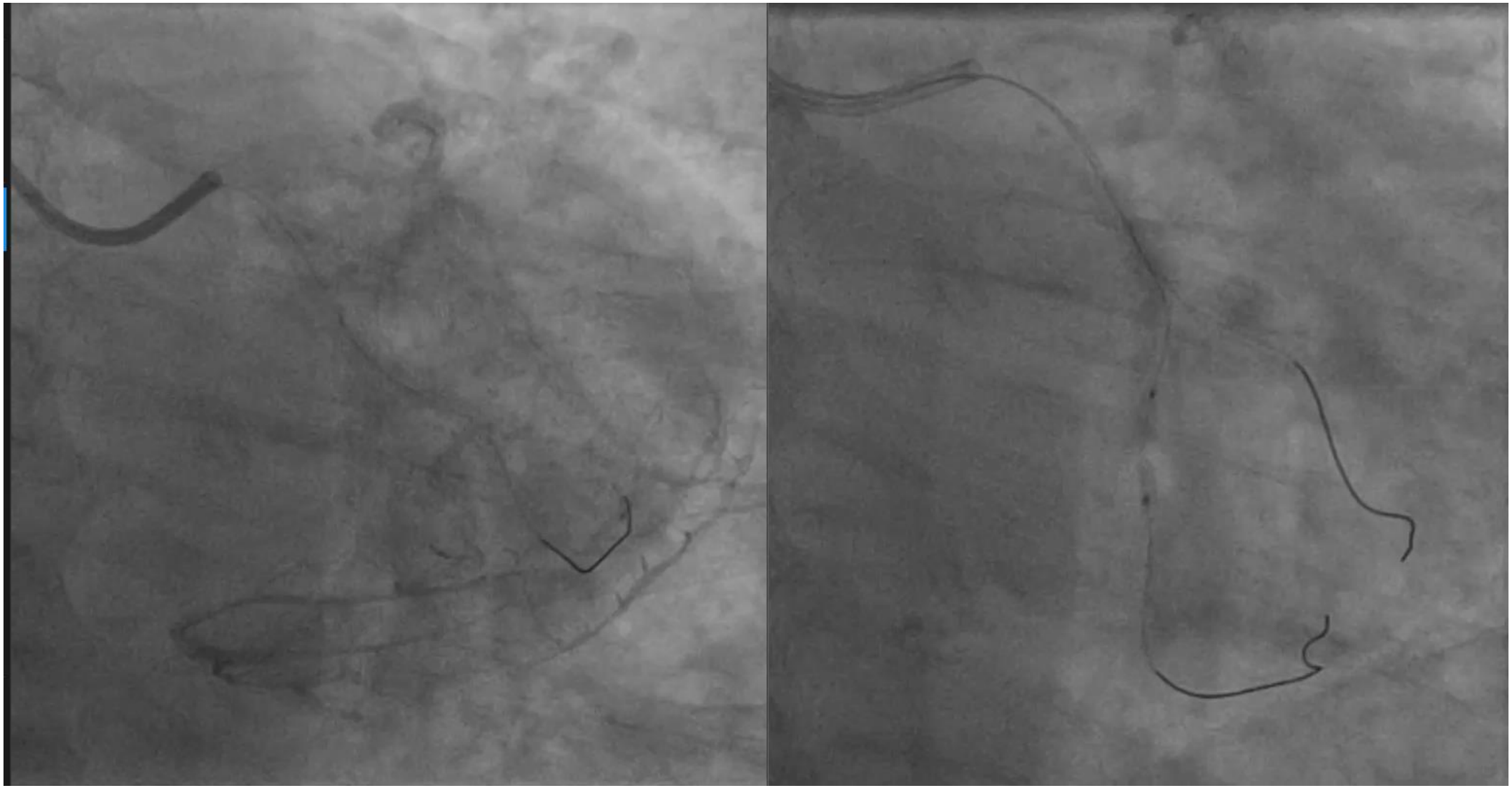
➢ A deep engage technique by a 6Fr soft guiding catheter is best solution for this situation. **An anchor balloon technique is always available to advance a guiding catheter and even 1.75mm burr can be used** by this method.

➔ Terumo Heart Rail

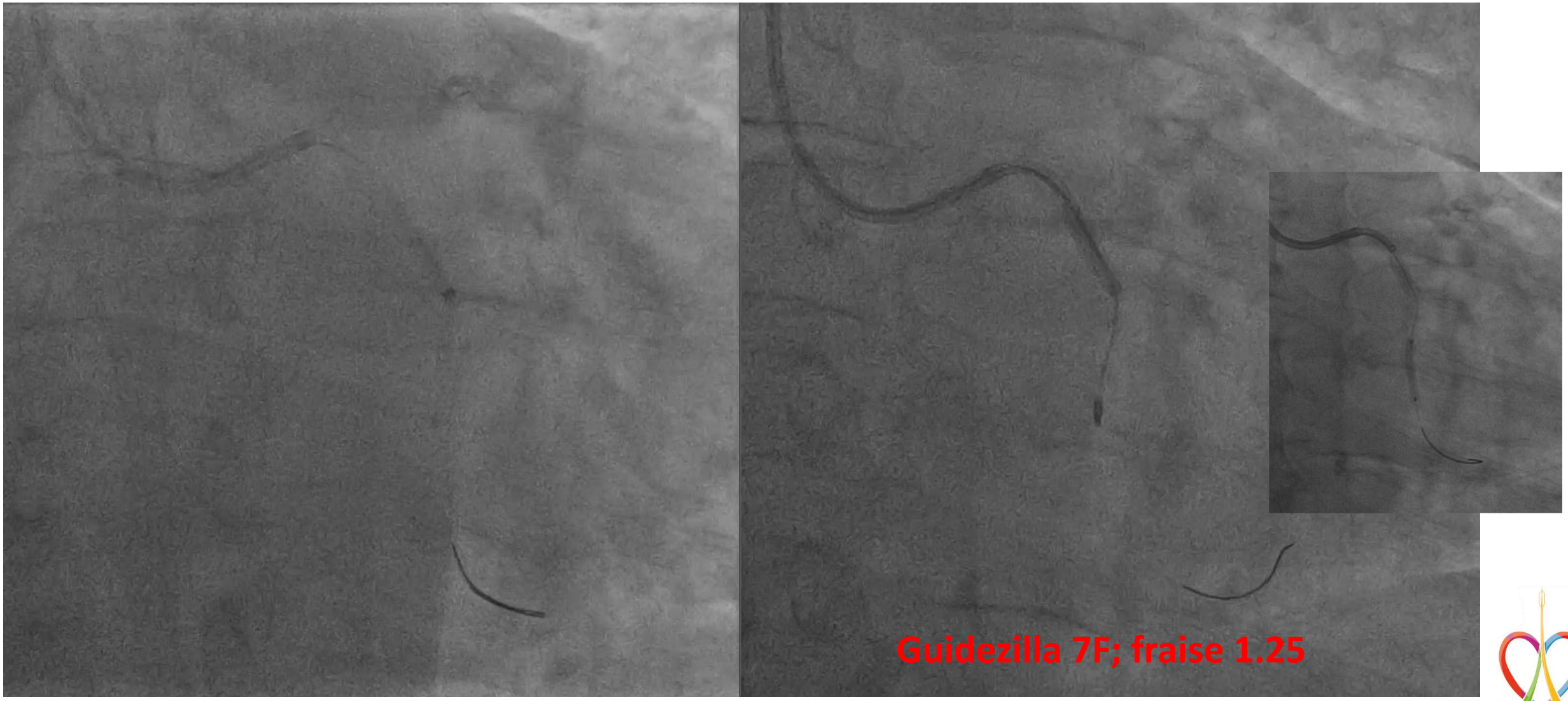
Sapporo Heart Center
Sapporo Cardio Vascular Clinic

Asia Medical Group
Wuhan-Xinjiang-HK-Sapporo

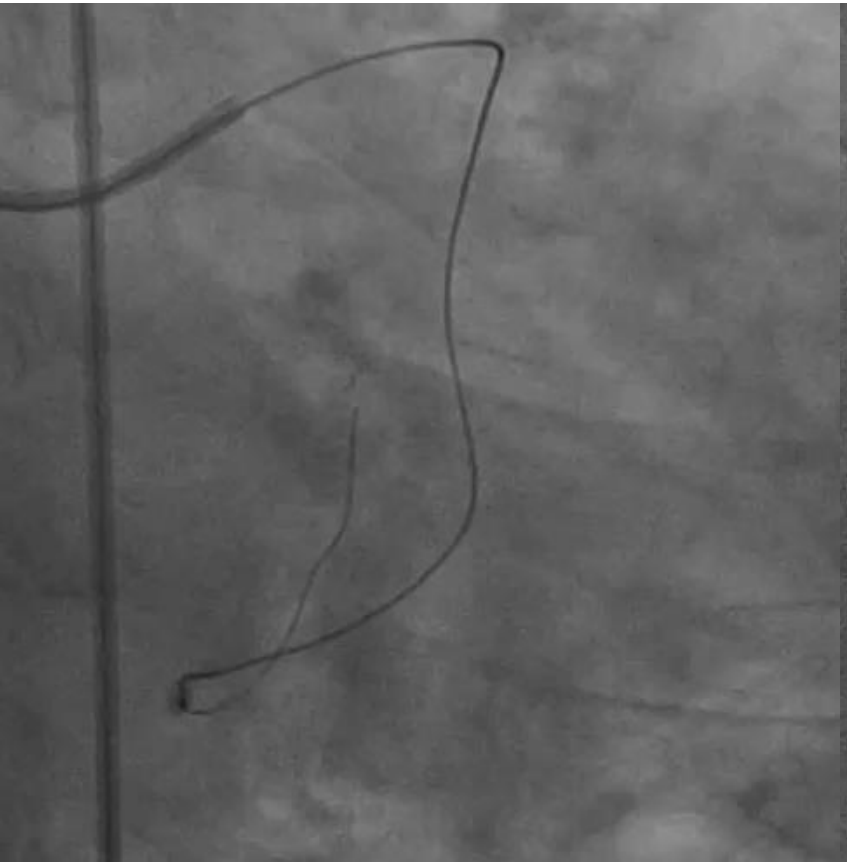
Rota: faciliter la délivrance de la fraise



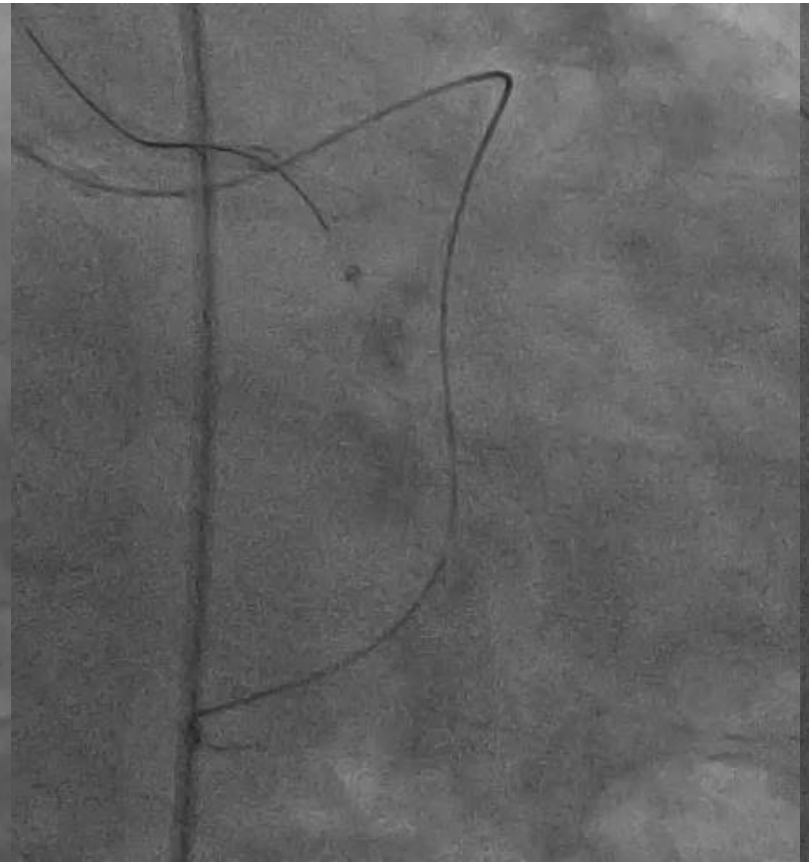
Rota: faciliter la délivrance de la fraise



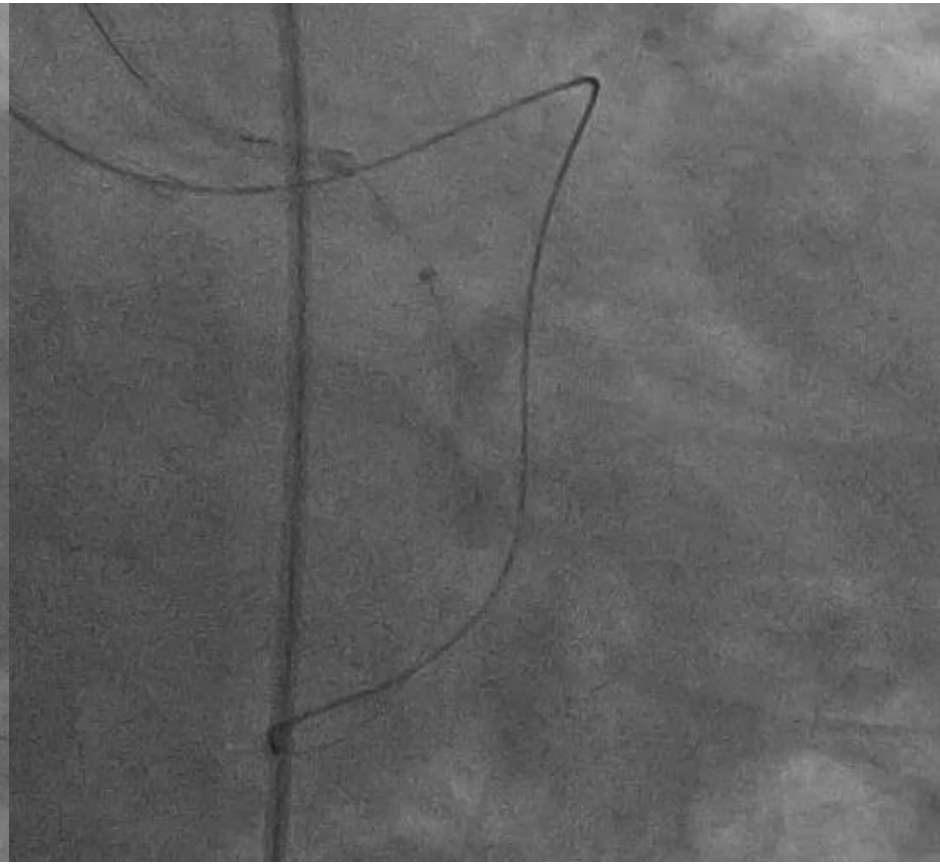
Rota: faciliter la délivrance de la fraise



Retrograde: vraie lumière à vraie lumière

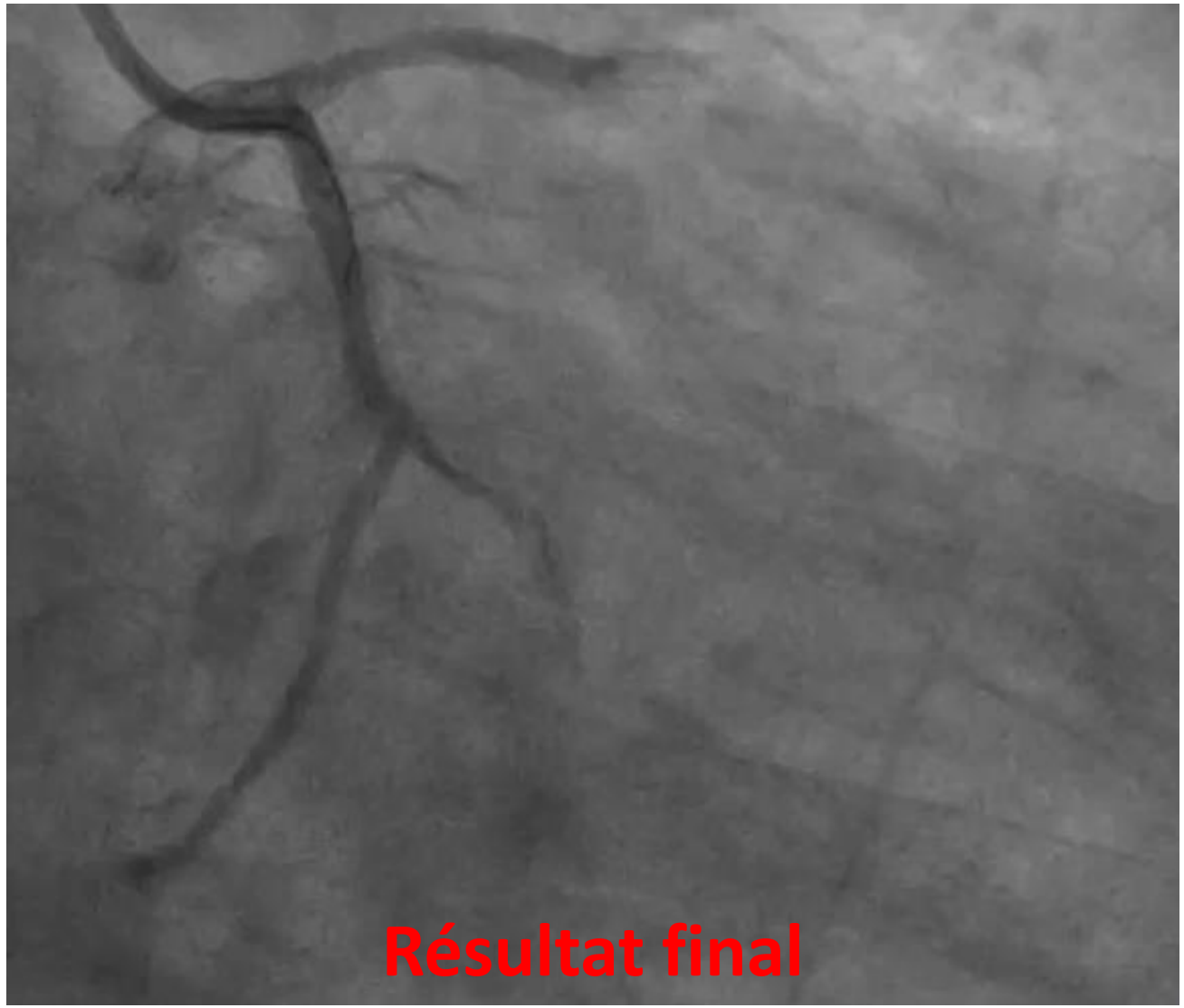


Externalisation dans guidezilla



Echec d'avancée du microcath: Tip-in

Rota: faciliter la délivrance de la fraise

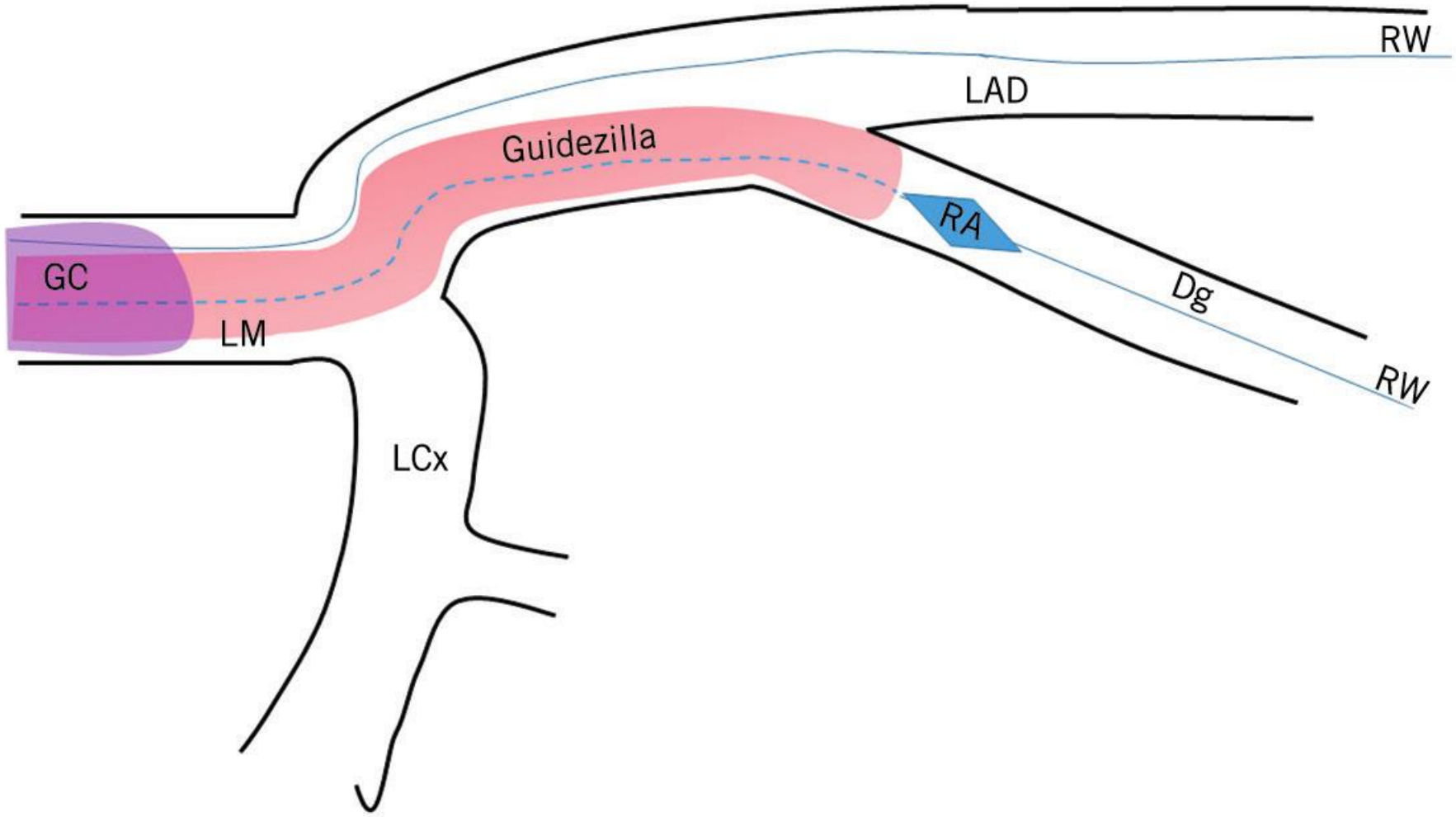


Intérêt de l'extension de cathéter :

1. Faciliter la délivrance du rota
2. Faciliter l'externalisation du guide

Rota: isoler un des guides lors du fraisage avec 2 guides

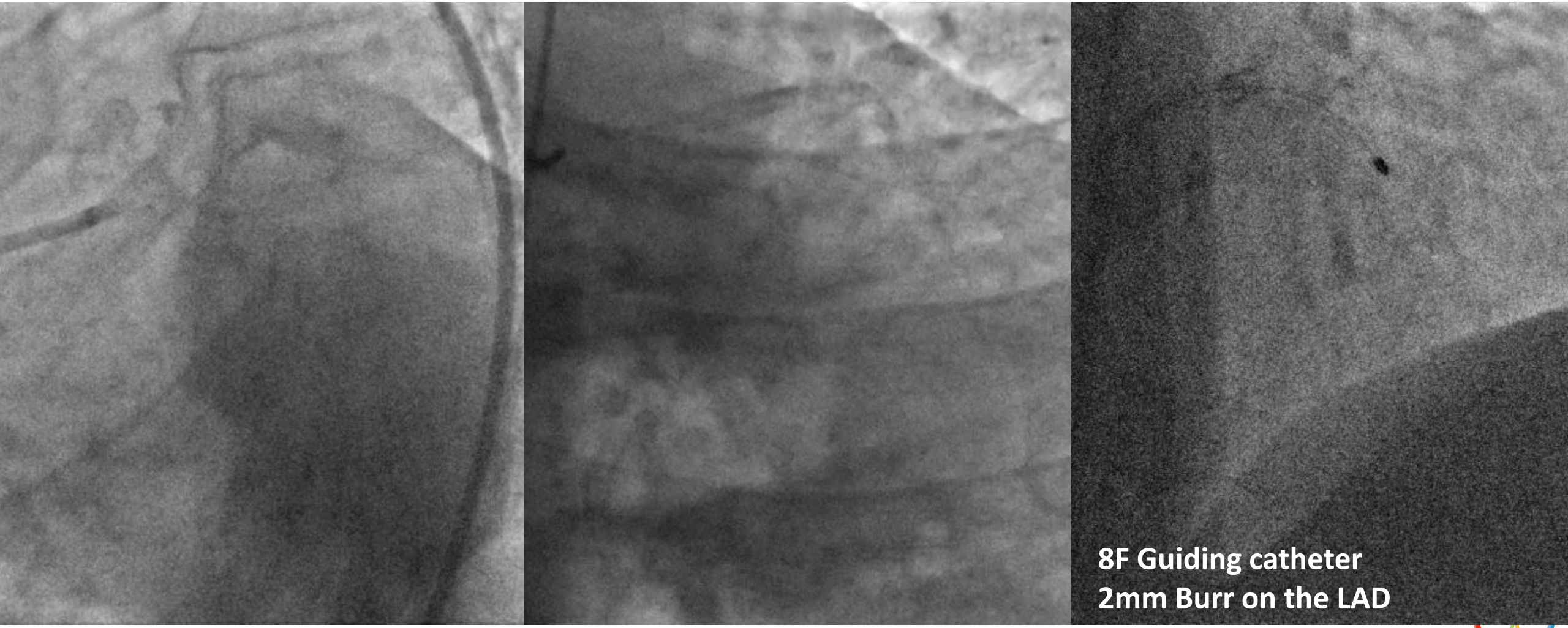
Double wire rotational atherectomy technique



Iannaccone M, EuroIntervention 2018 Jun 20;14(2):204-205

Rota: isoler un des guides lors du fraisage avec 2 guides

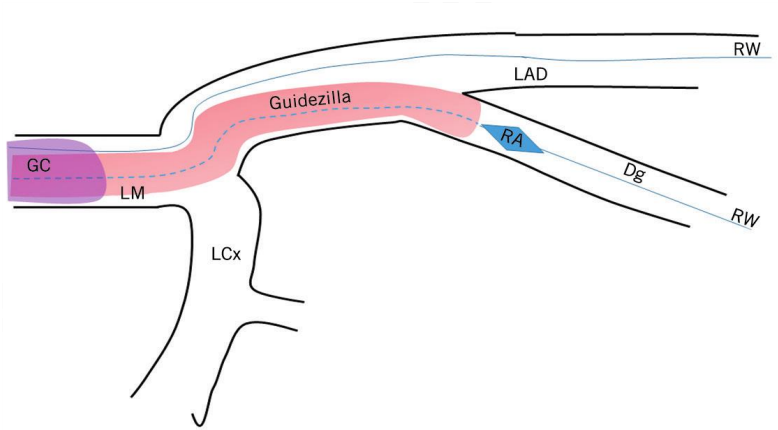
Double wire rotational atherectomy technique

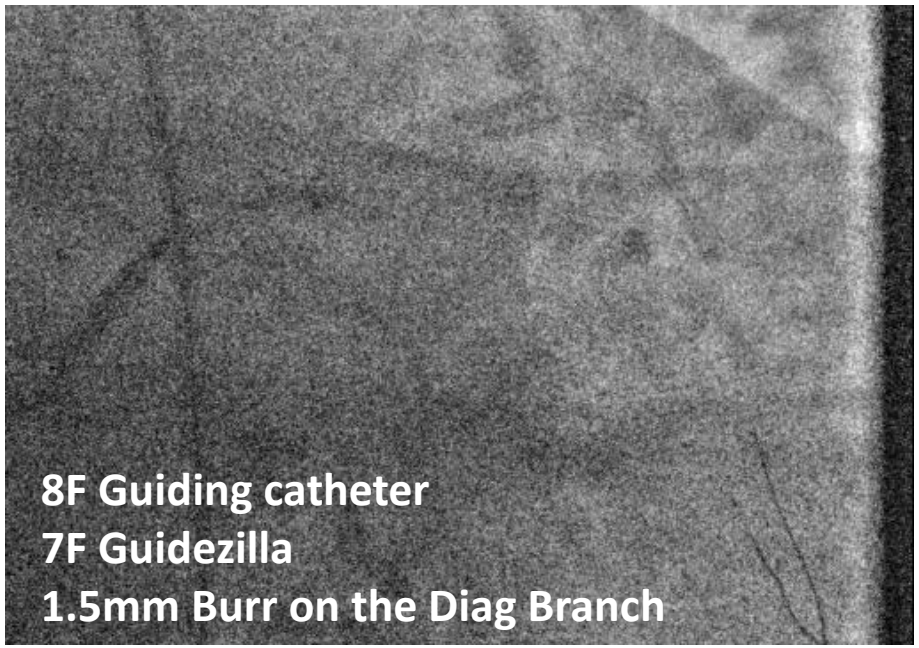


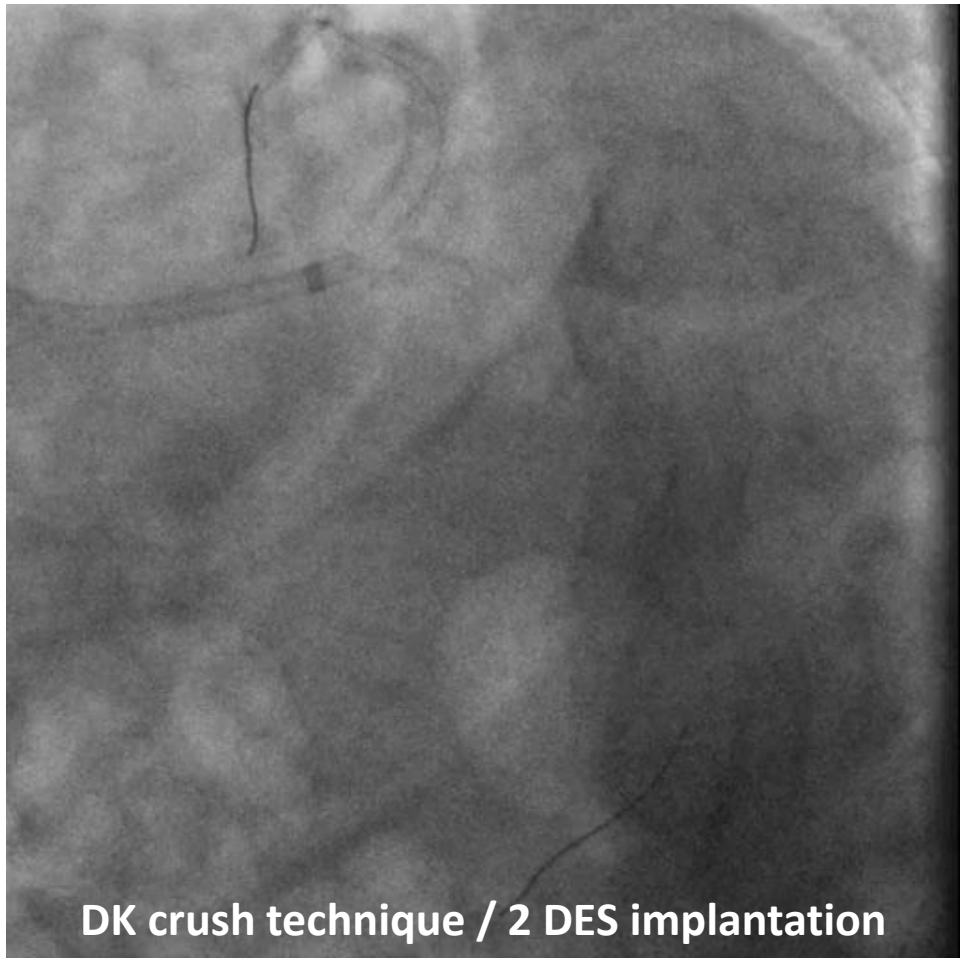
Iannaccone M, EuroIntervention 2018 Jun 20;14(2):204-205

Rota: isoler un des guides lors du fraisage avec 2 guides

Double wire rotational atherectomy technique

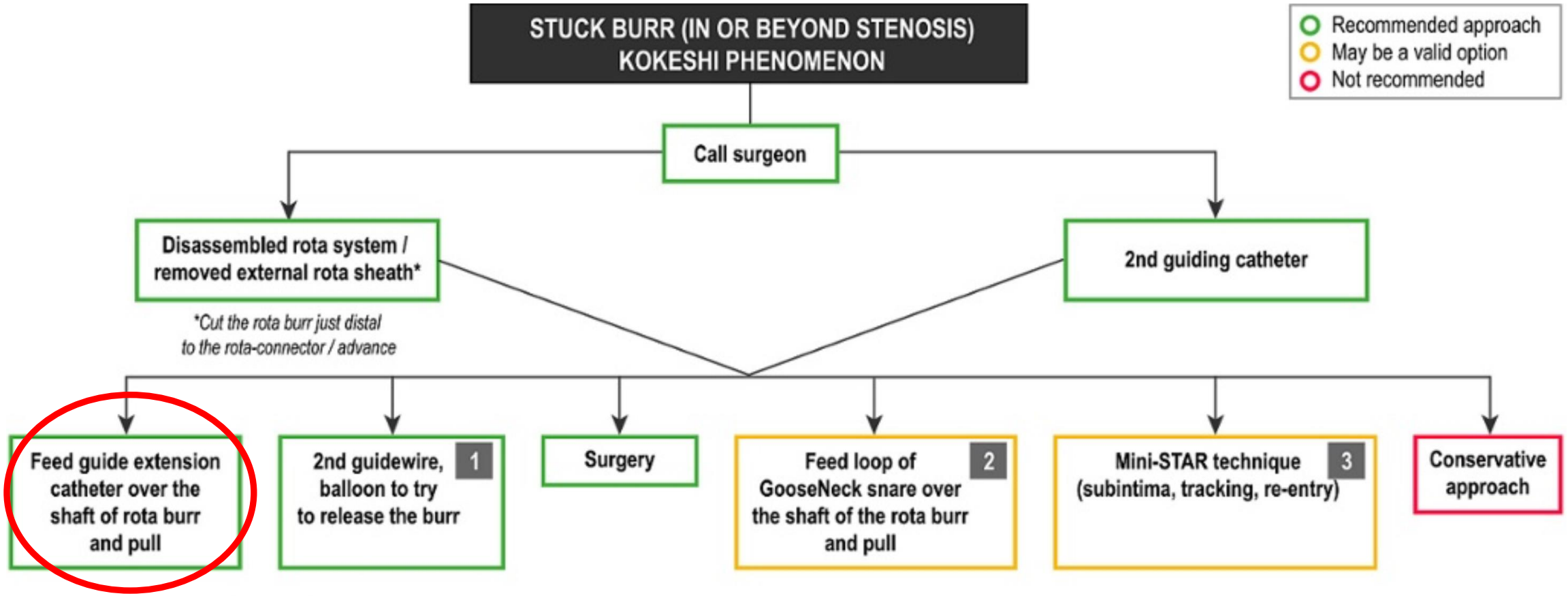




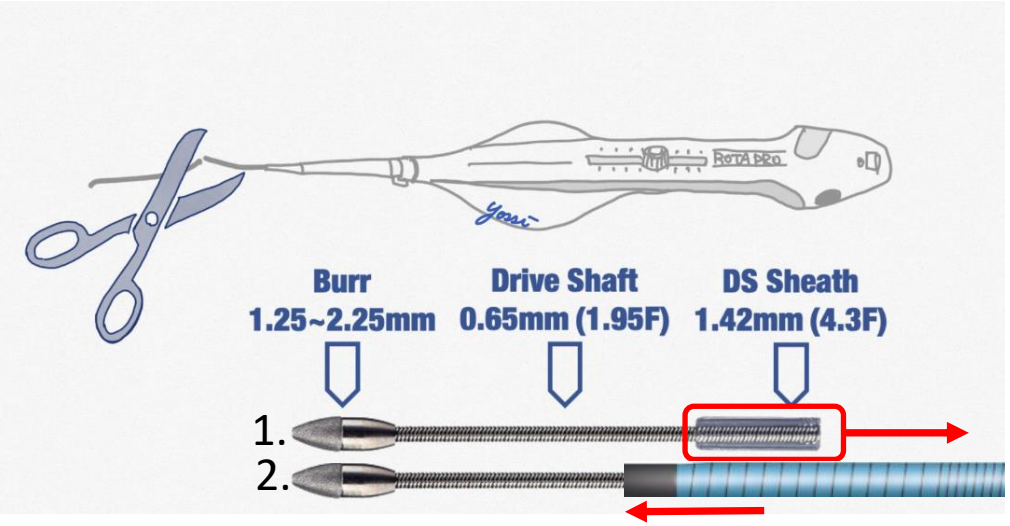


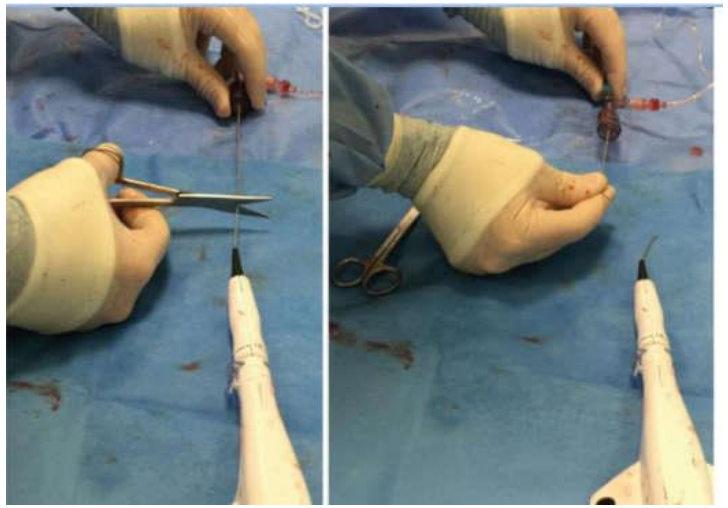
Iannaccone M, EuroIntervention 2018 Jun 20;14(2):204-205

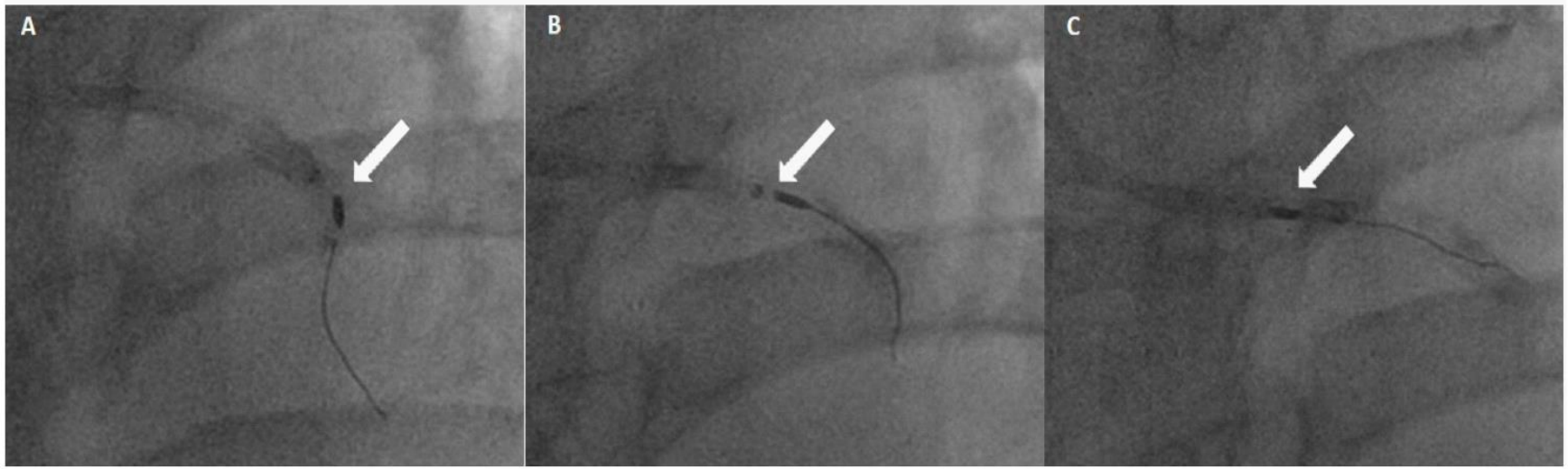
Extraire une fraise bloquée

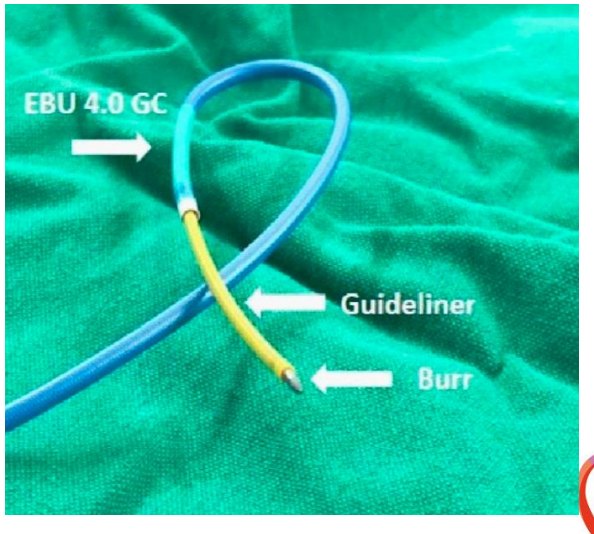


Extraire une fraise bloquée







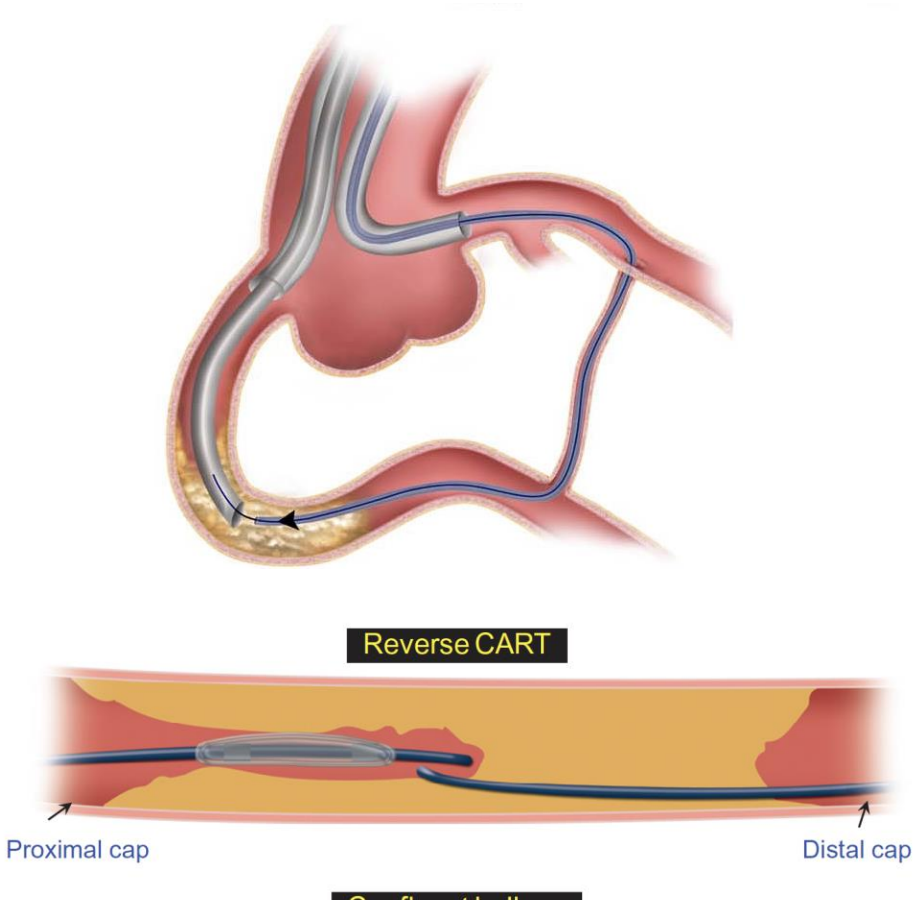


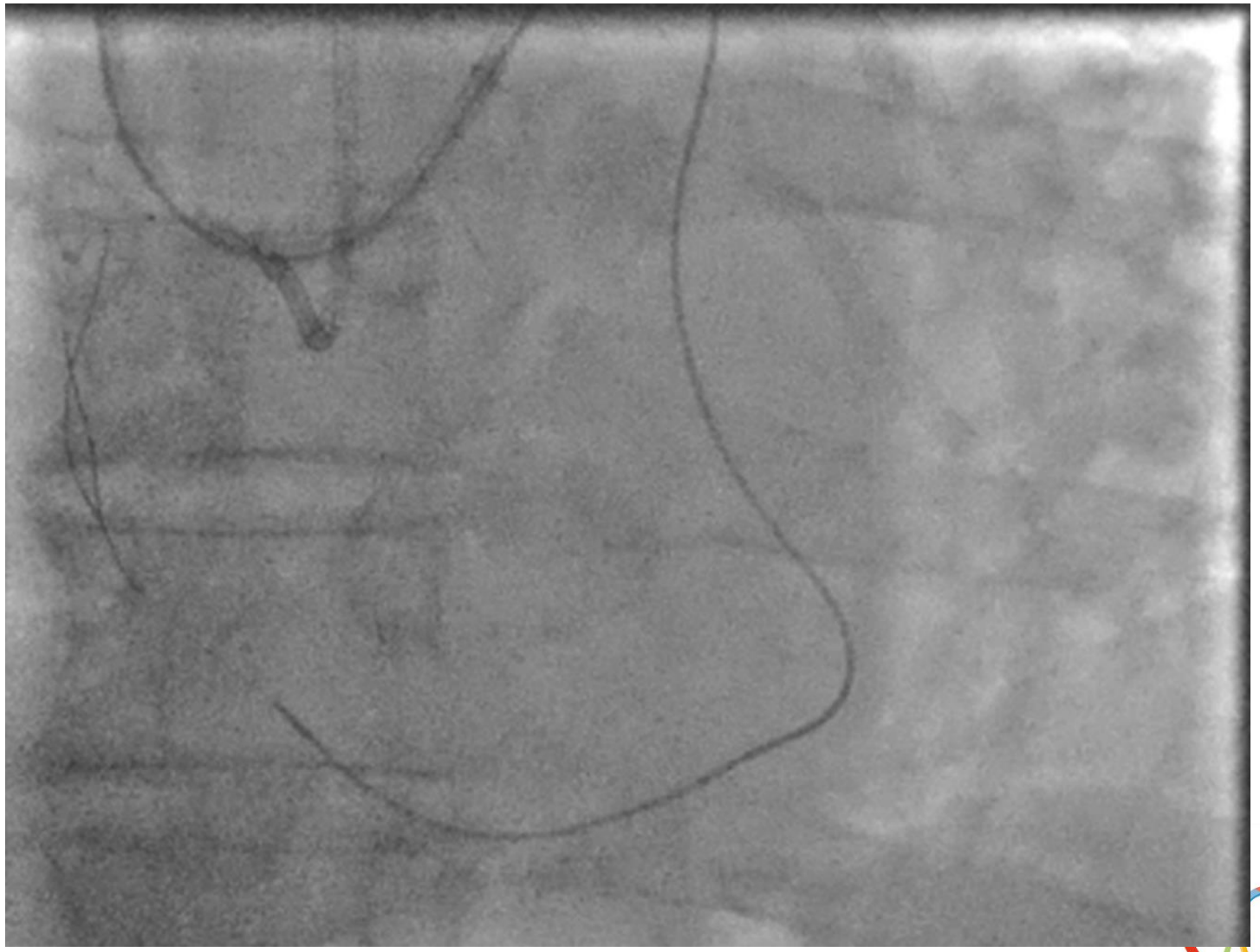
Jin X, Journal of Clinical Images and Medical Case Reports, 2021

Extension de Cathéter guide & CTO

CTO & extension de cathéter

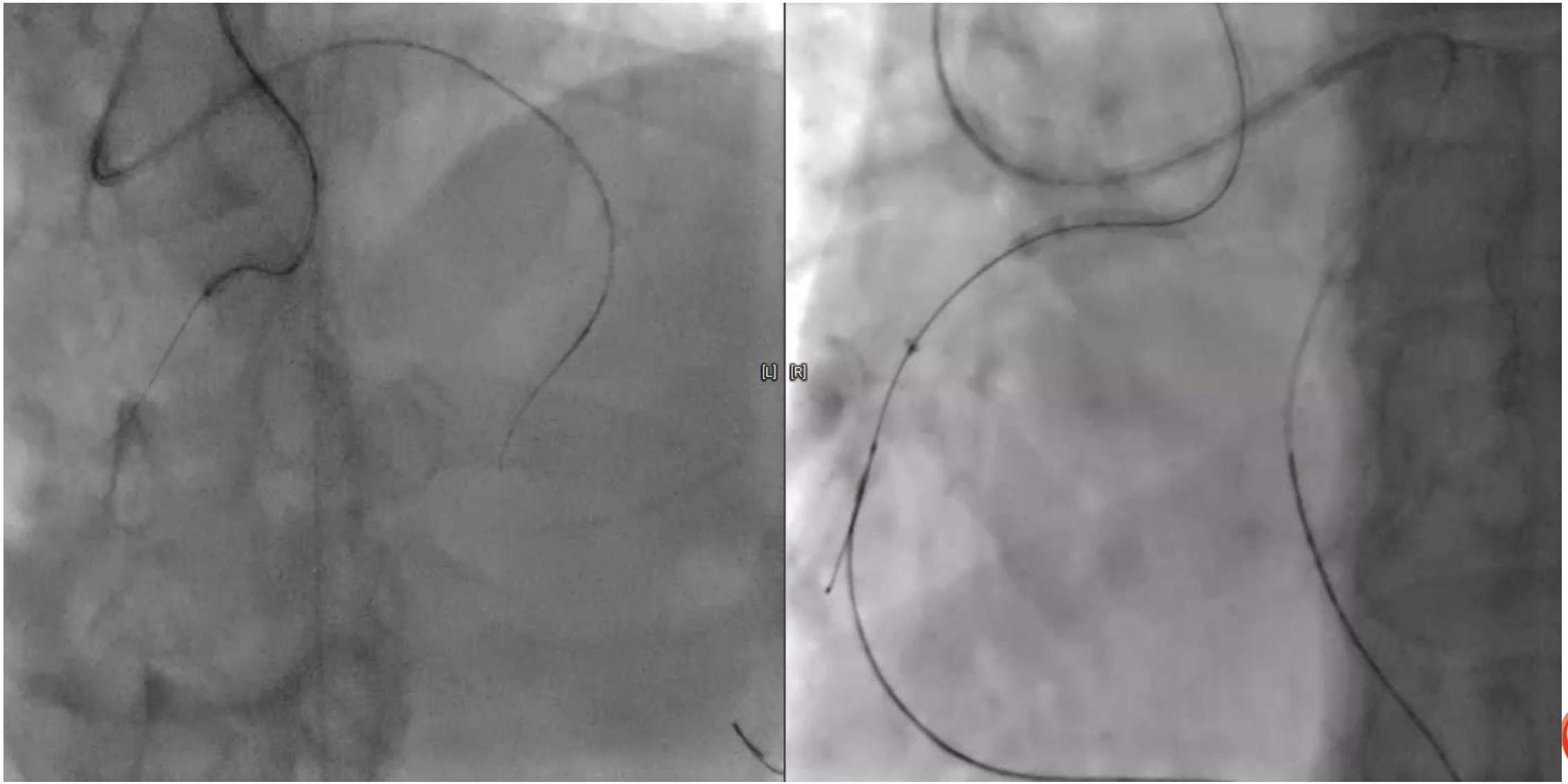
REVERSE CART « facilité »



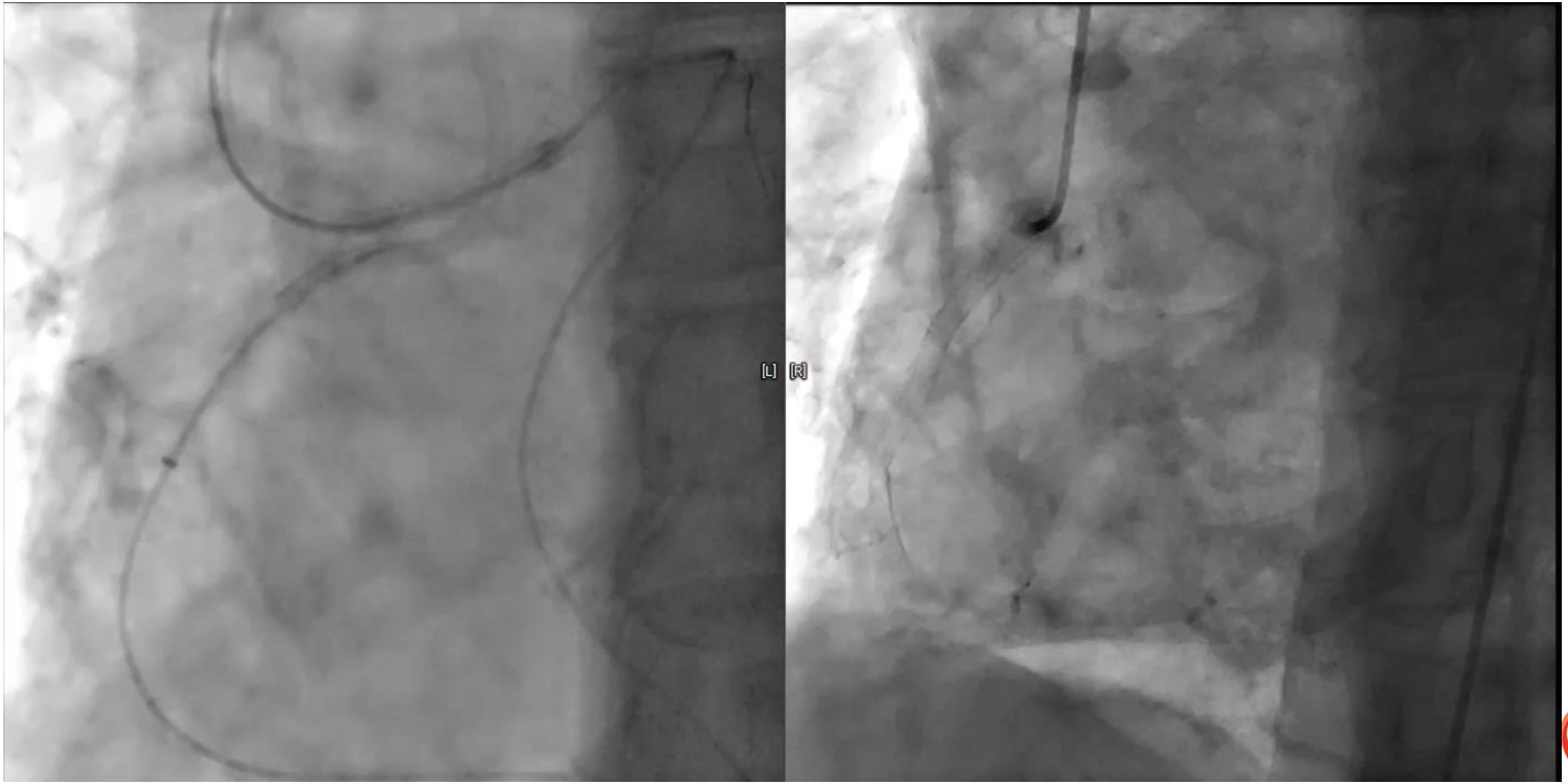


Reverse CART « facilité »

Reverse CART « facilité »



Reverse CART « facilité »

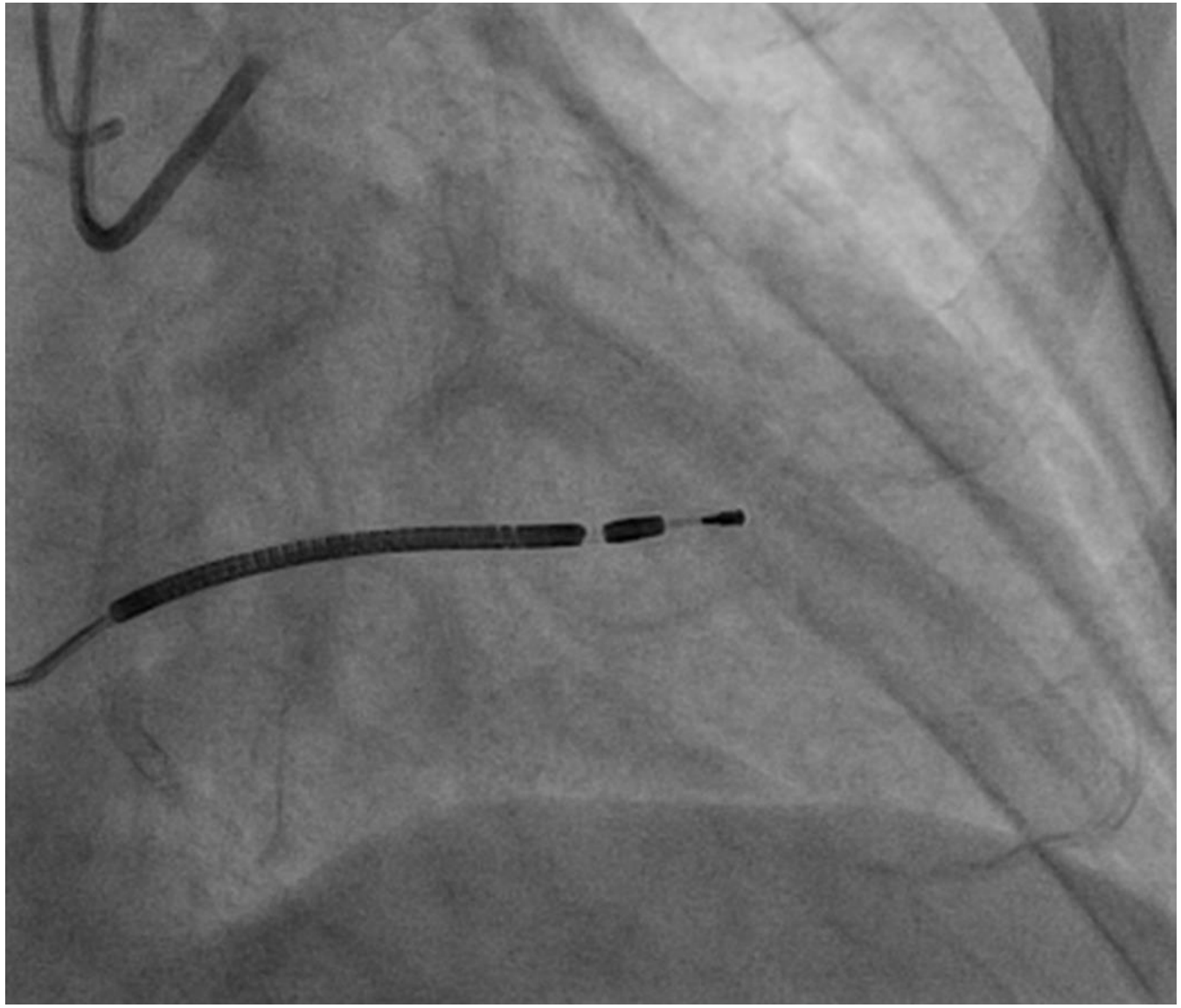


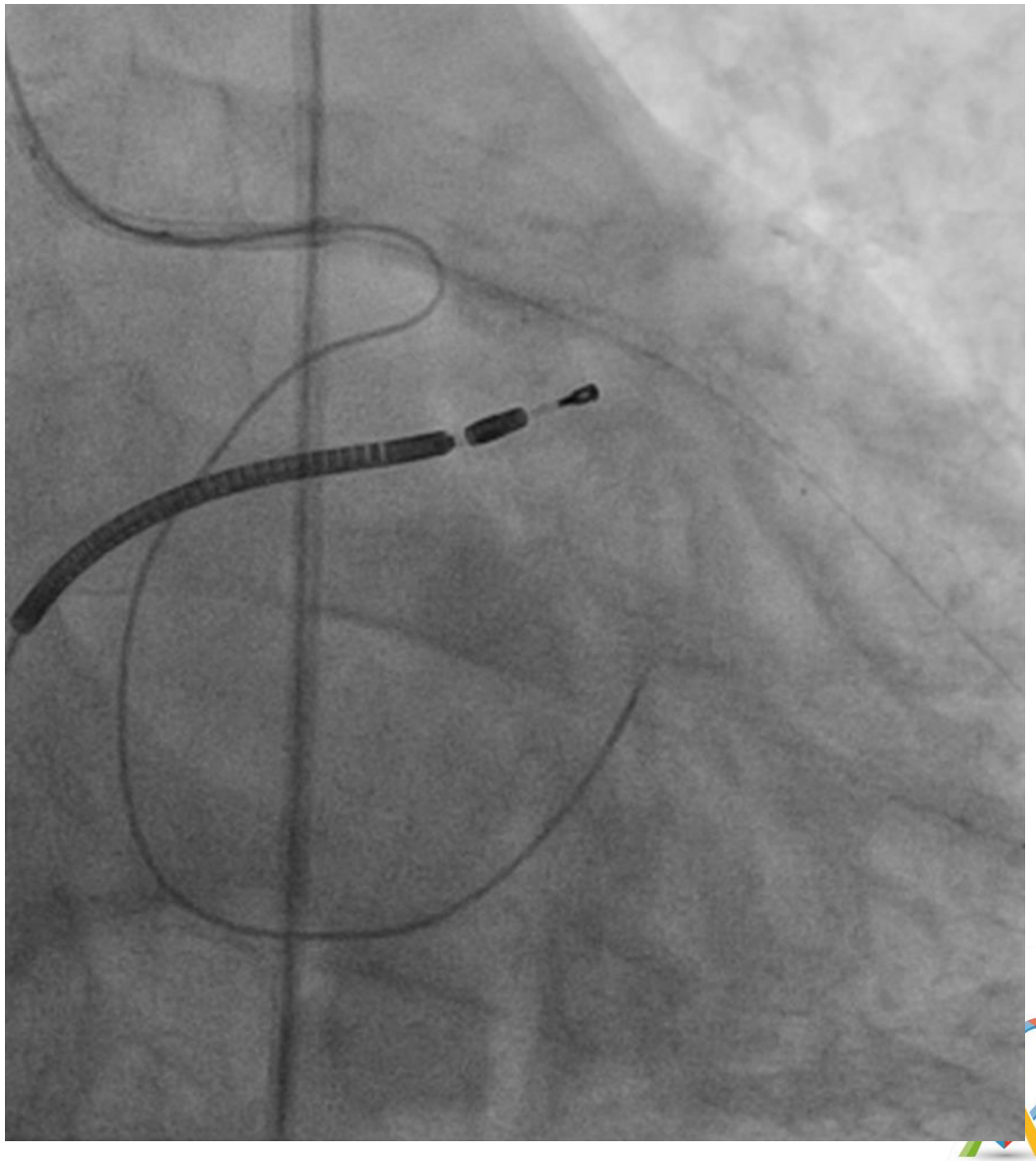
CTO & extension de cathéter

CTO des IVA et Cx ostiales par voie rétrograde

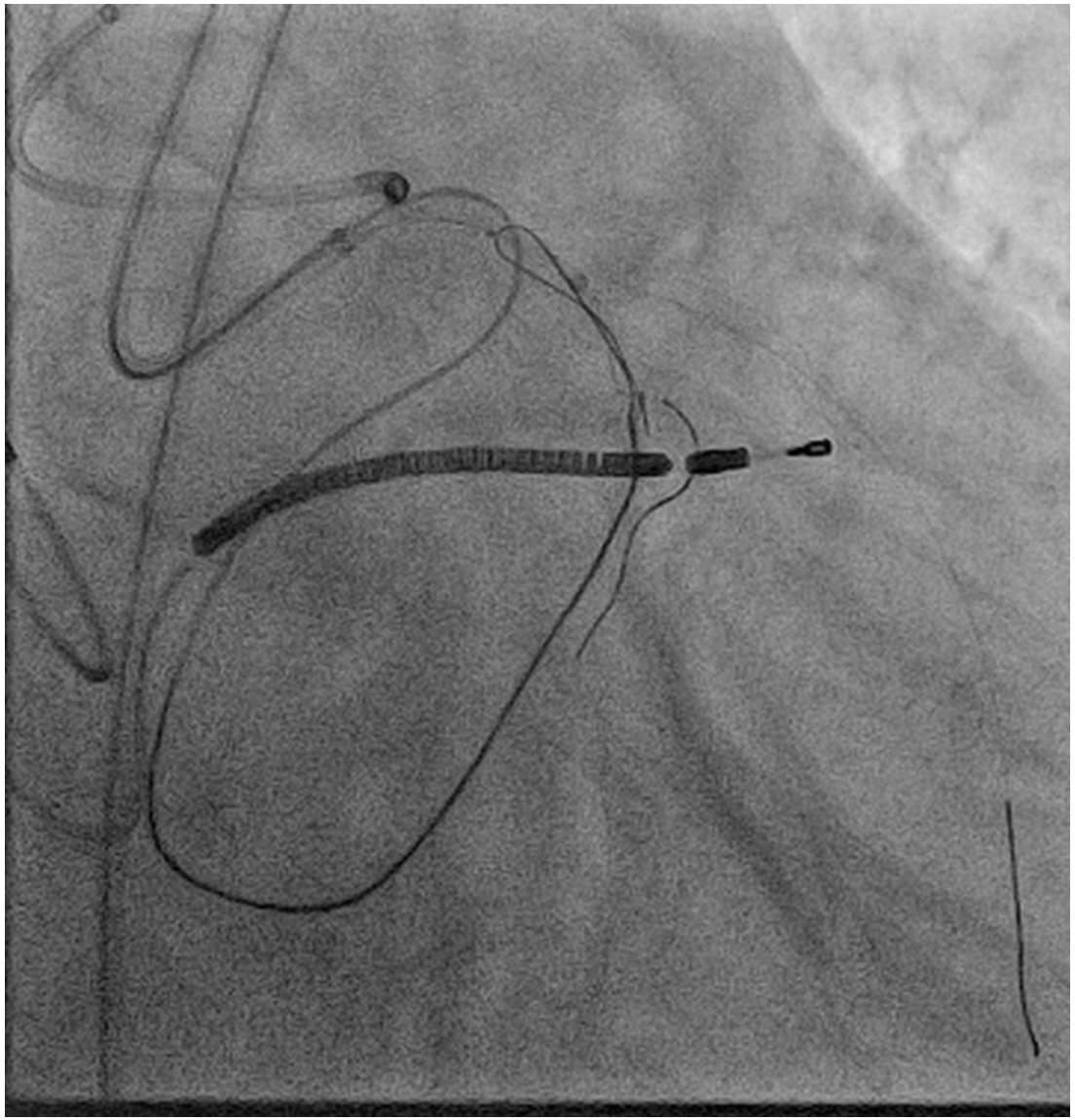
Protection du TC pour éviter les dissections occlusives

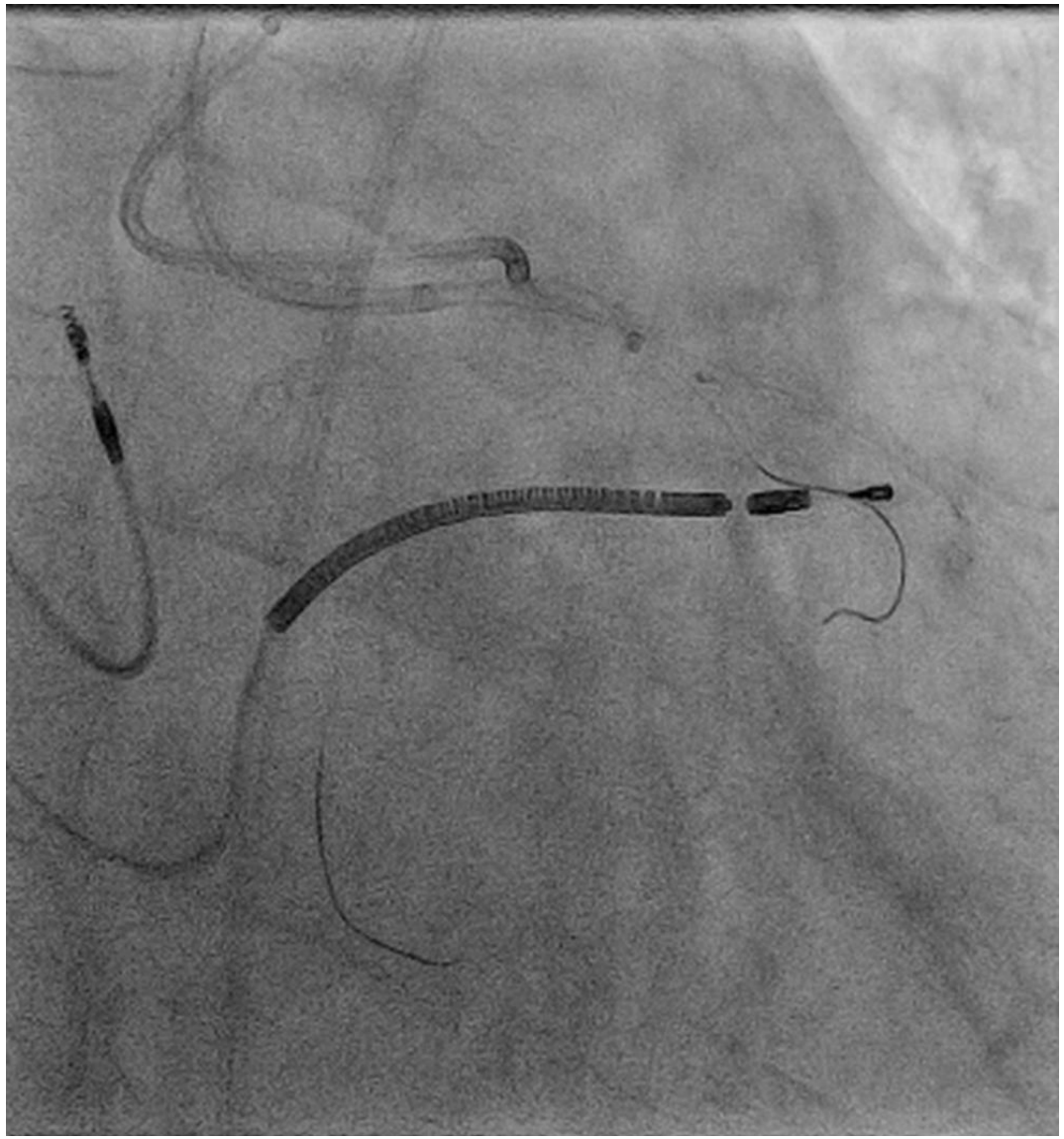
CTO Cx ostiale: protection du TC par Extension



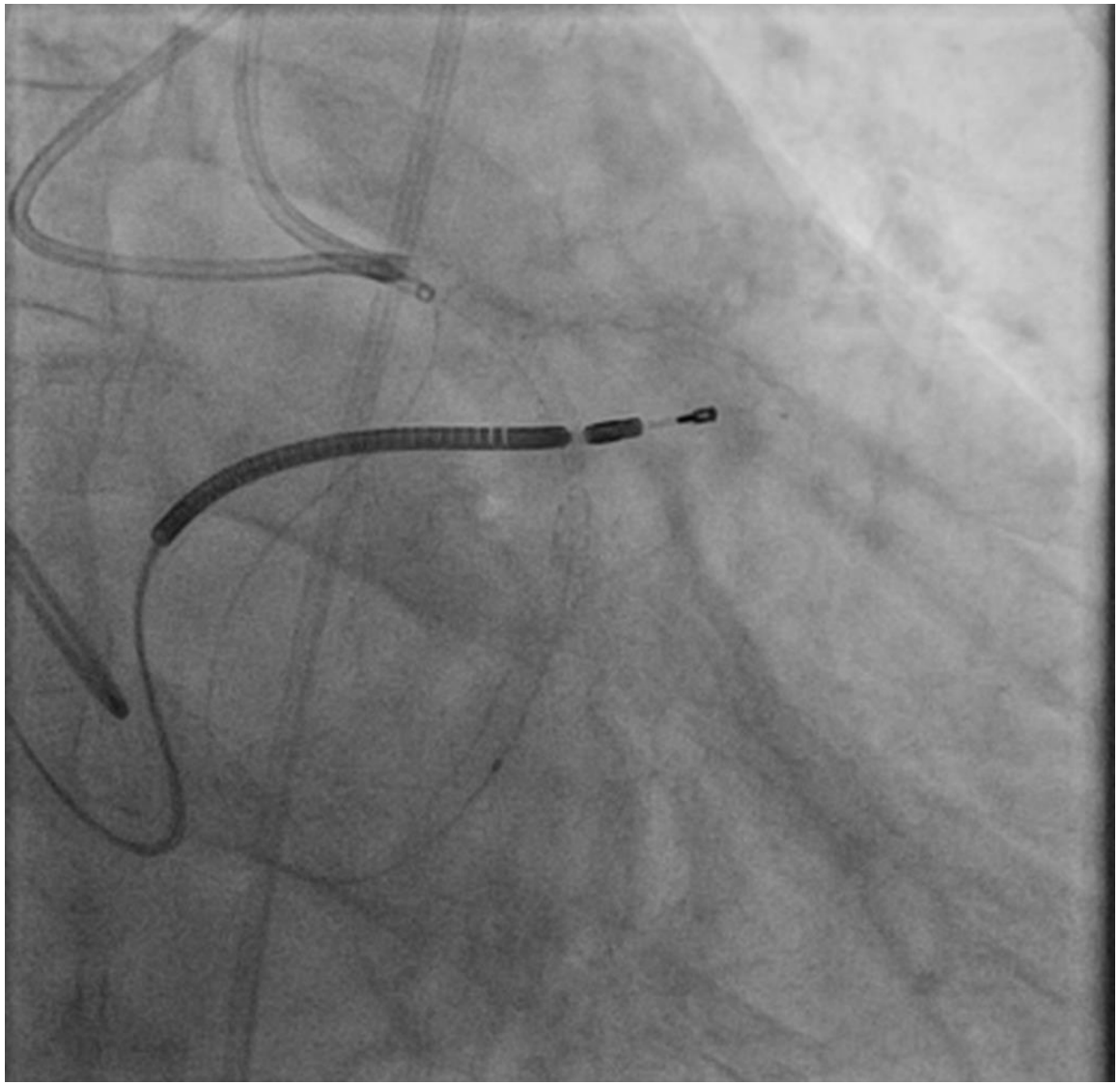


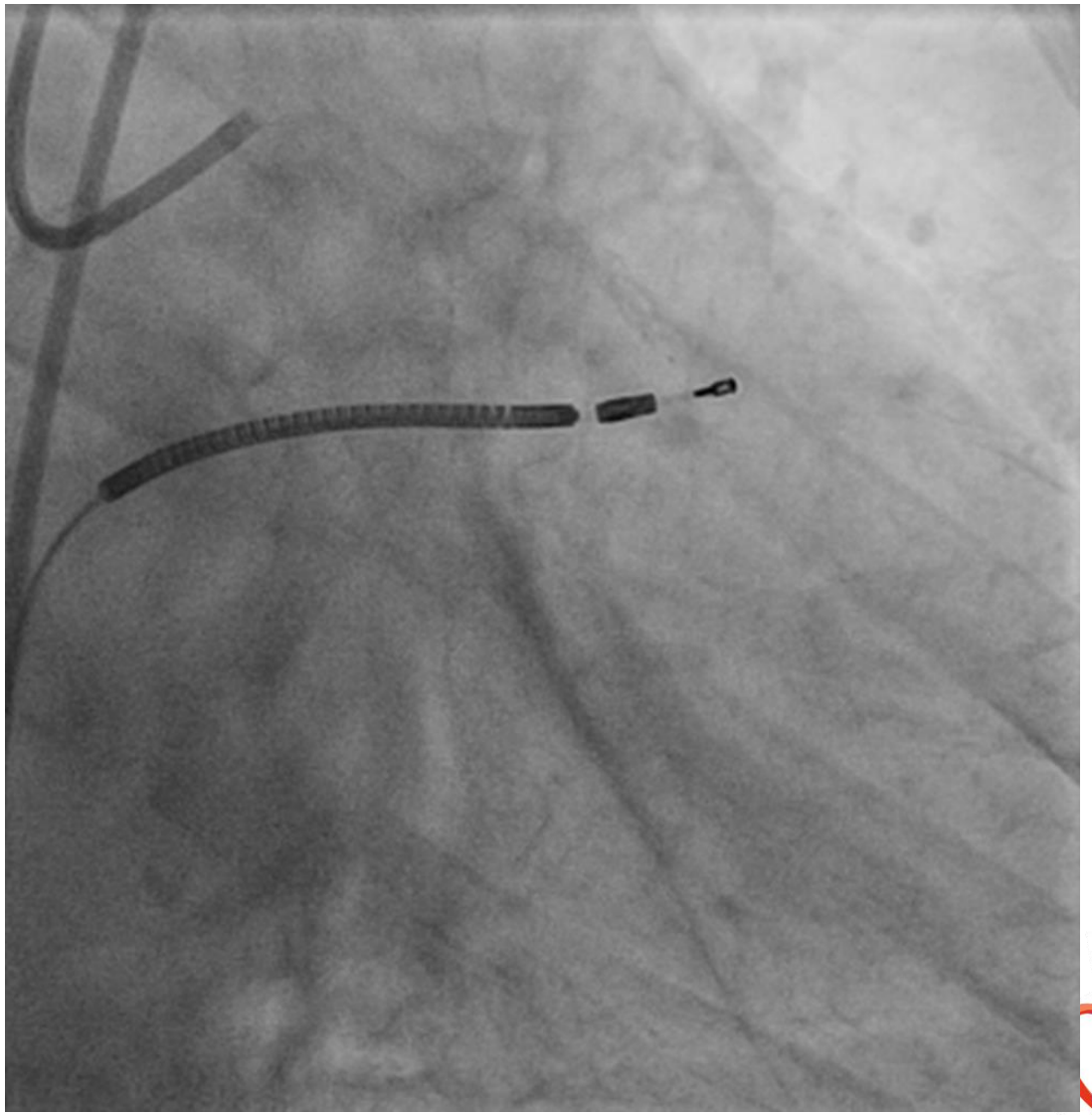
CTO Cx ostiale: protection du TC par Extension





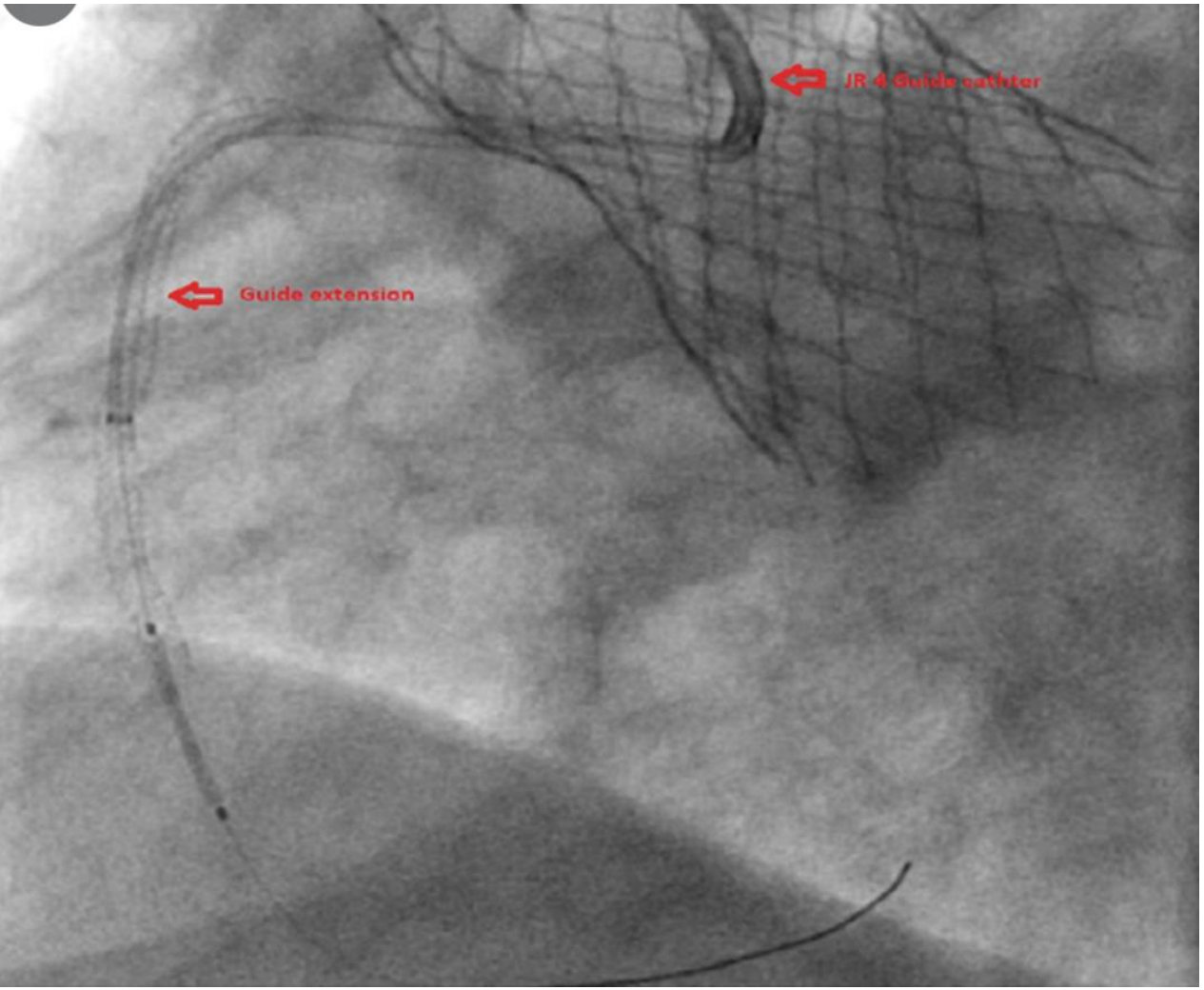
CTO Cx ostiale: protection du TC par Extension

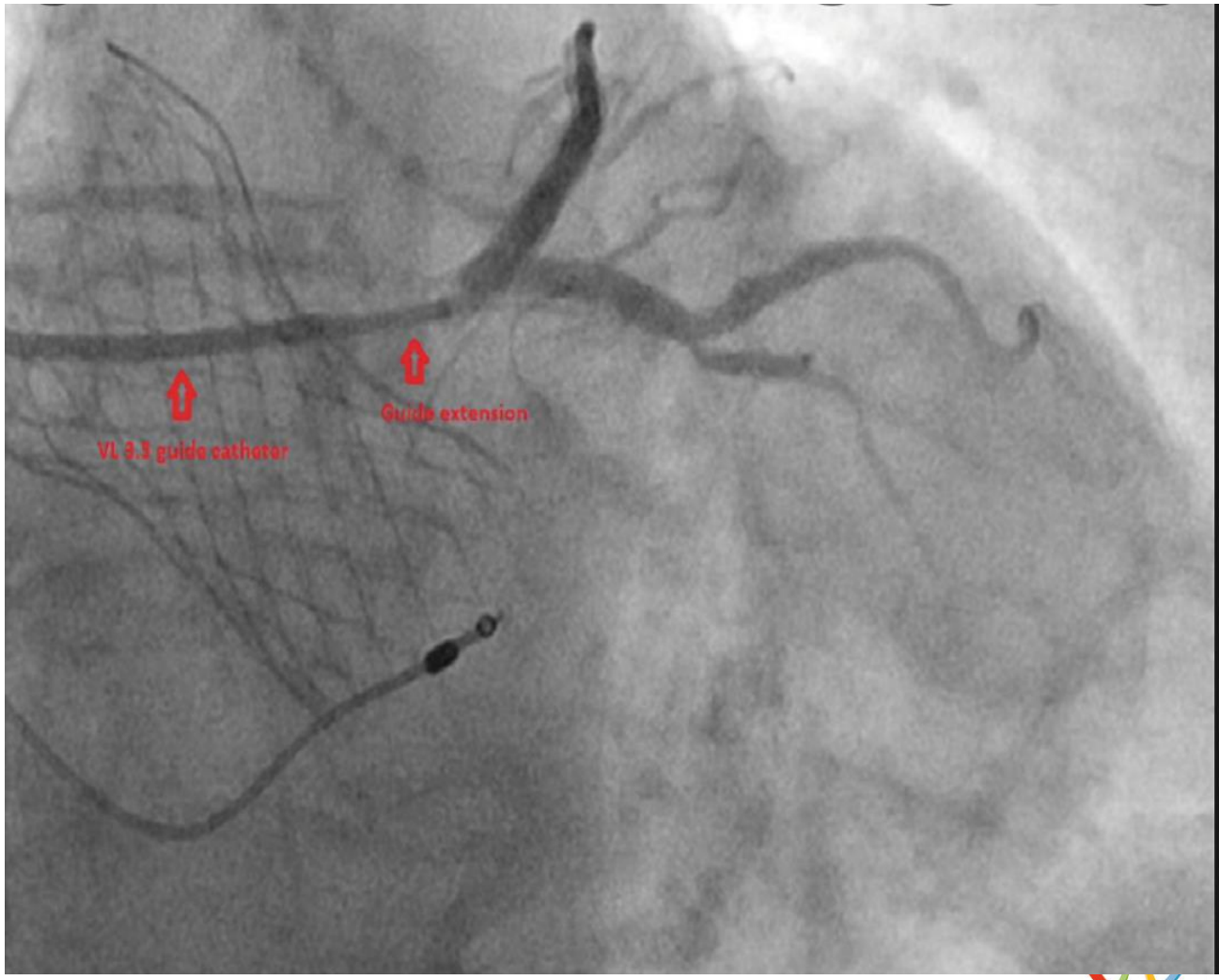




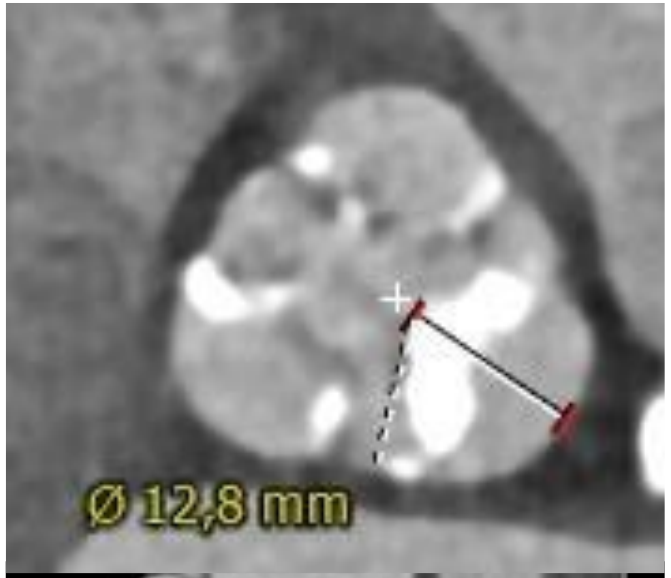
Extension de Cathéter
& TAVI

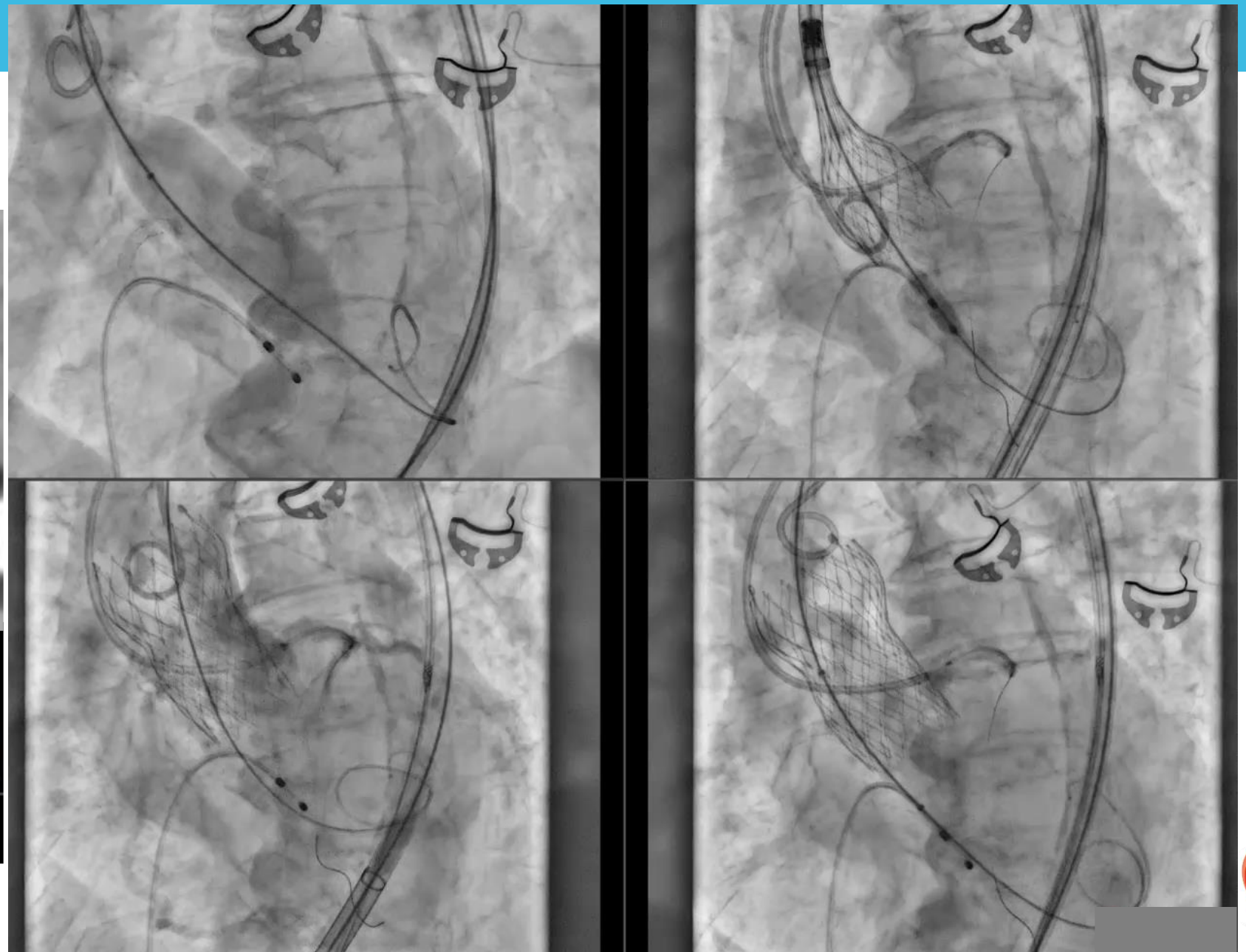
TAVI: permettre intubation sélective des coronaires



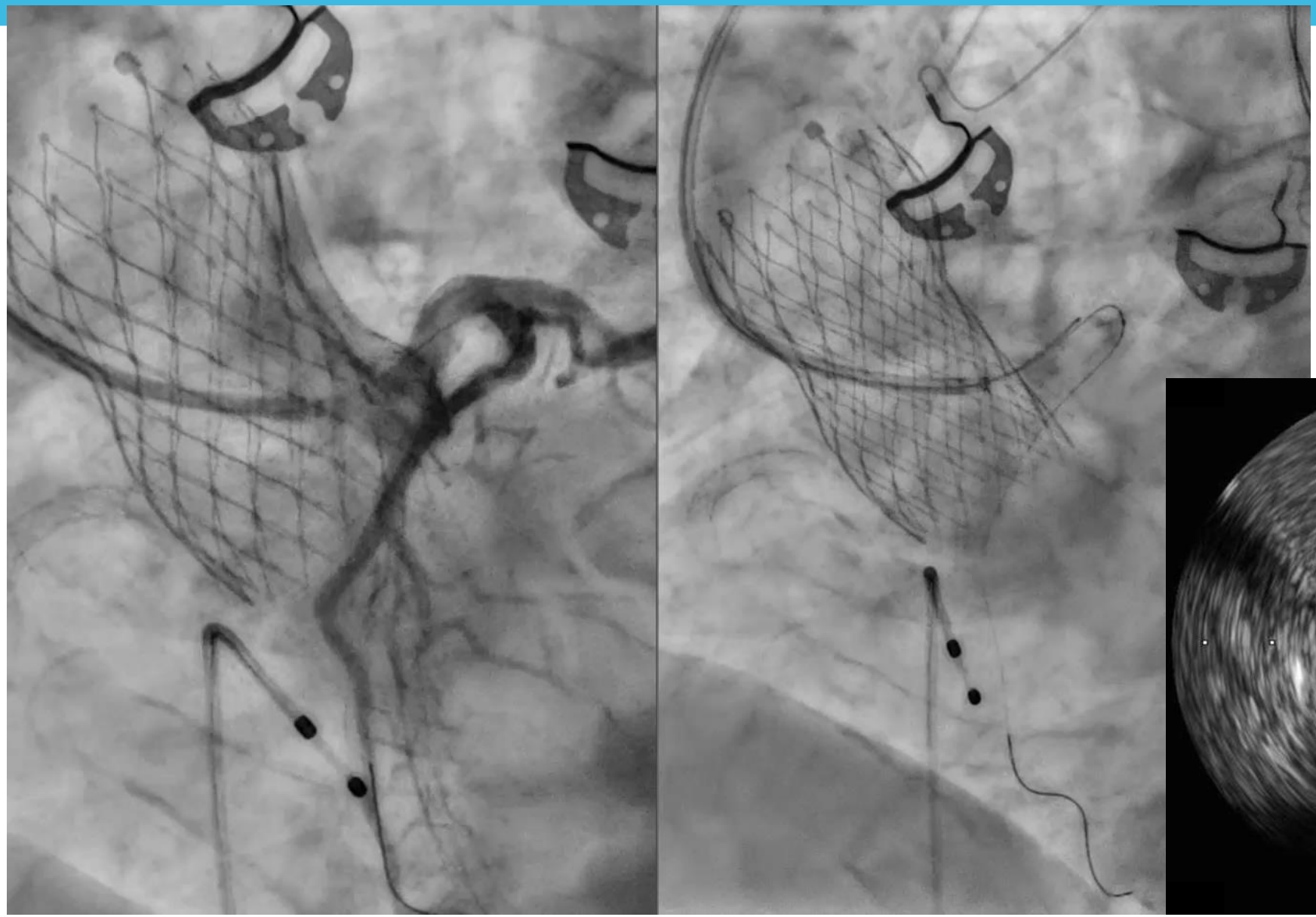


Protection coronaire: isoler le stent du TAVI

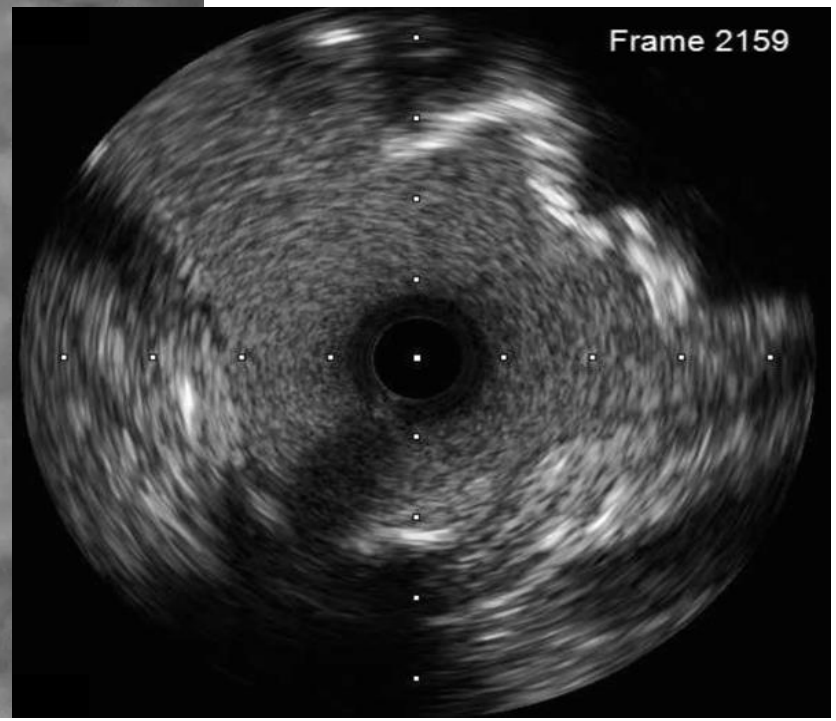




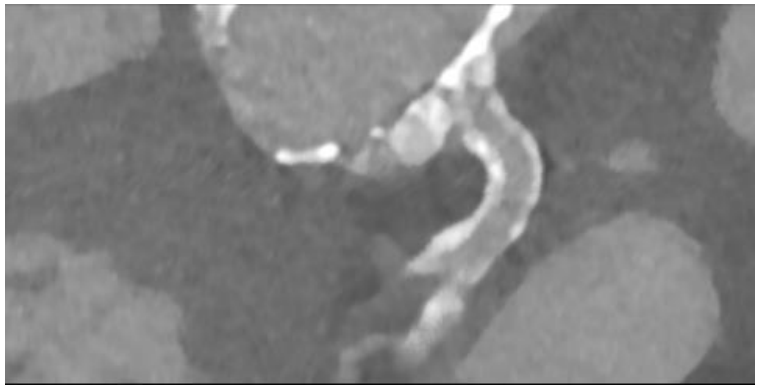
Protection coronaire: isoler le stent du TAVI

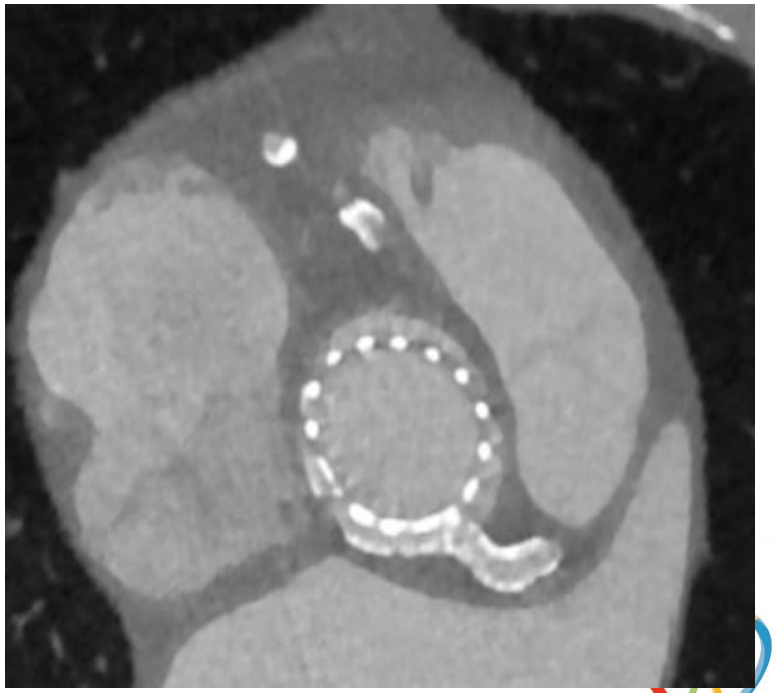


Empreinte de la leaflet native sur l'ostium du TC



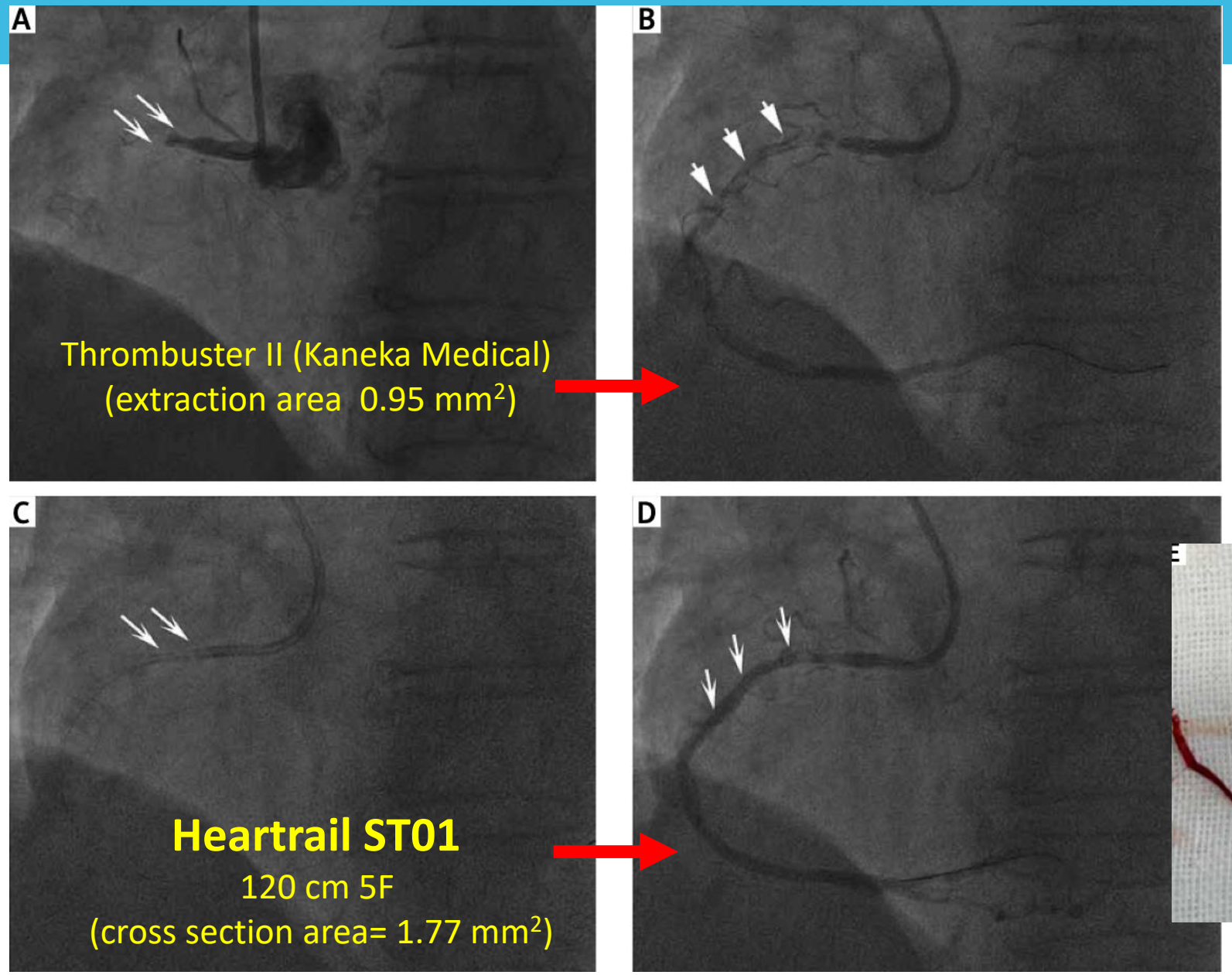
Protection coronaire: isoler le stent du TAVI

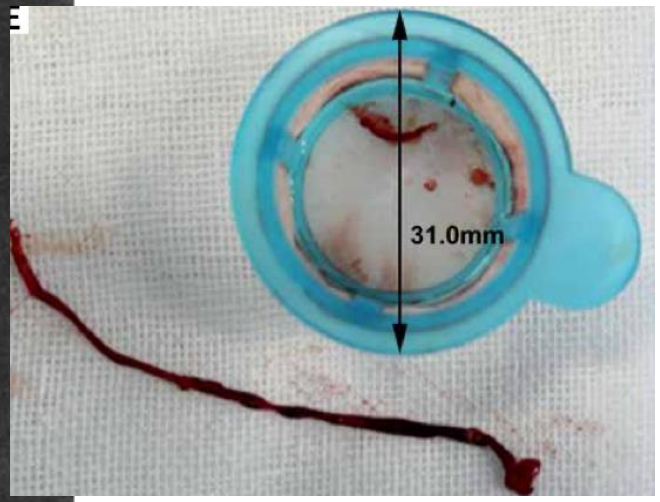




Extension de Cathéter & Thromboaspiration

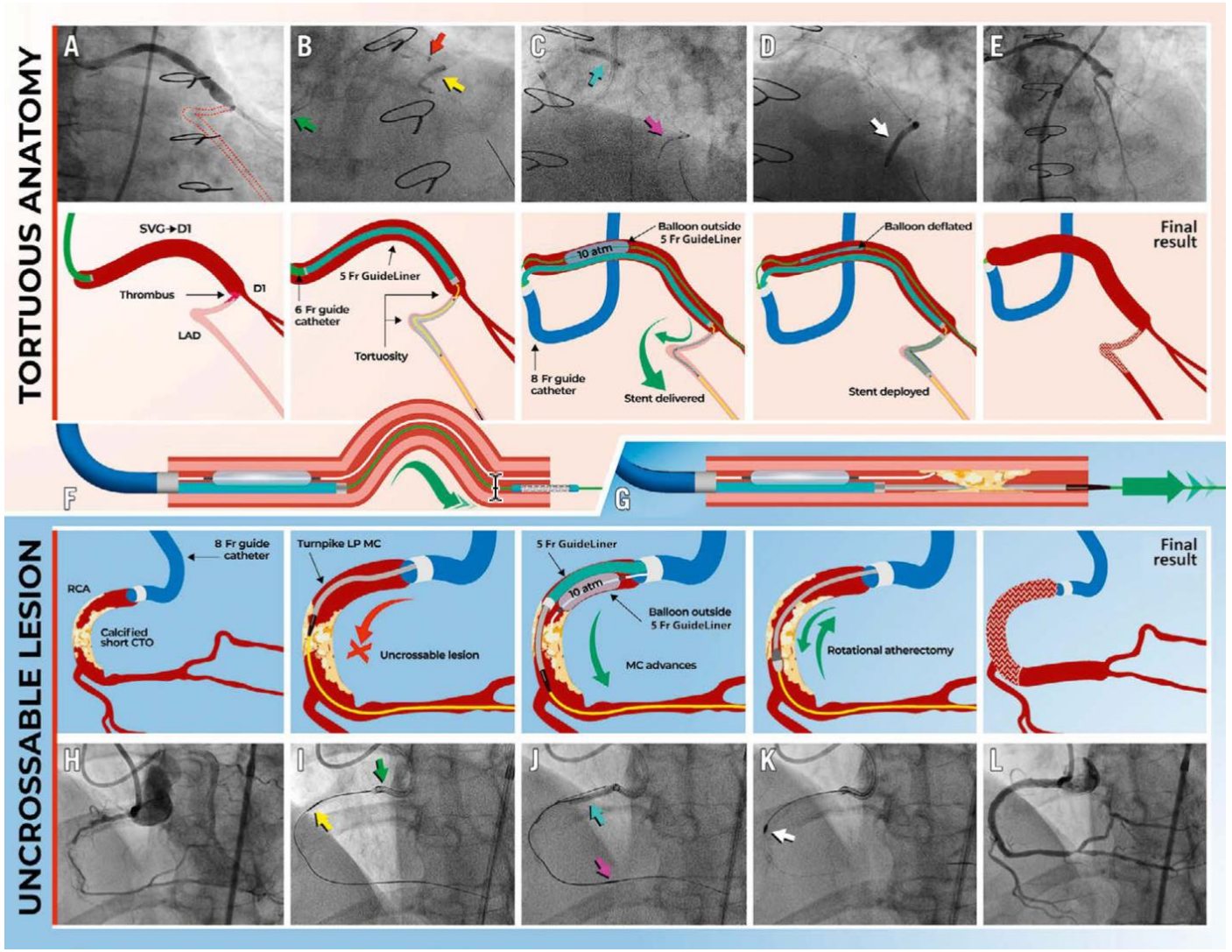
Extension & Thromboaspiration





Chen H, Advances in Interventional Cardiology 2020; 16, 4 (62)

Nouvelles techniques d’utilisations



Santiago R, Euointervention 2021

Merci

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