



Cannulation

Chapter 3:

Catheter choice for diagnostic angiogram

Catheter choice for graft cannulation

Guiding catheter choice



JL: how to do it?

Catheter often arrives in right or non-coronary sinus

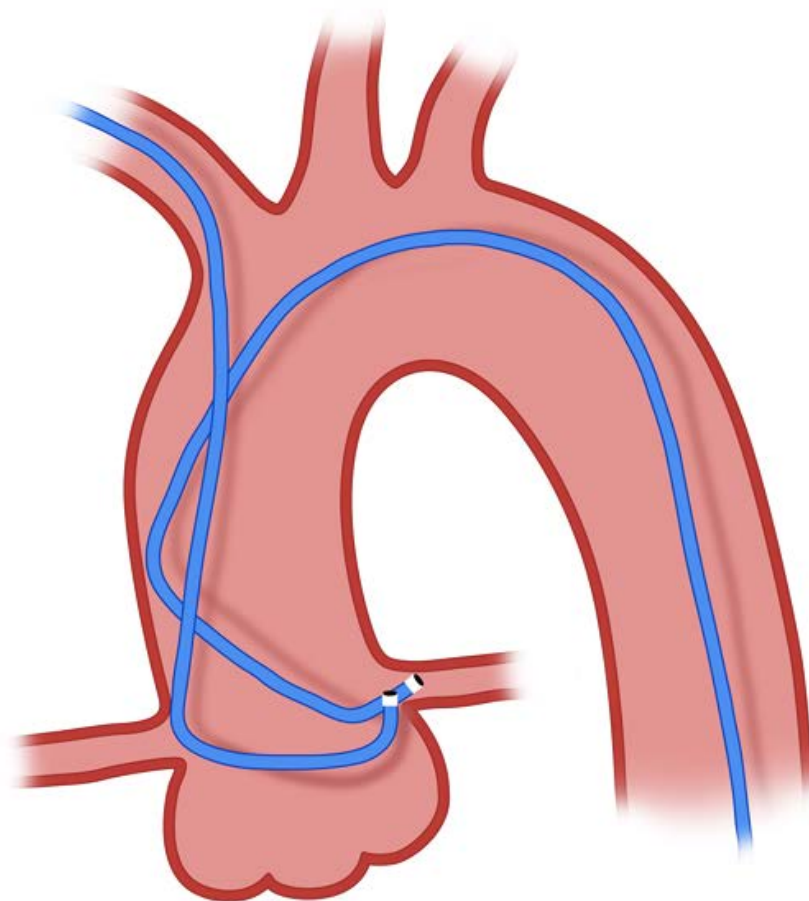
Pull and clockwise rotate to get into left sinus

If catheter below LCA ostium anticlockwise and advance (or pull)

Get co-axial!



JL right radial vs femoral, different size of catheter and different co-axiality





Second choice catheters, LCA

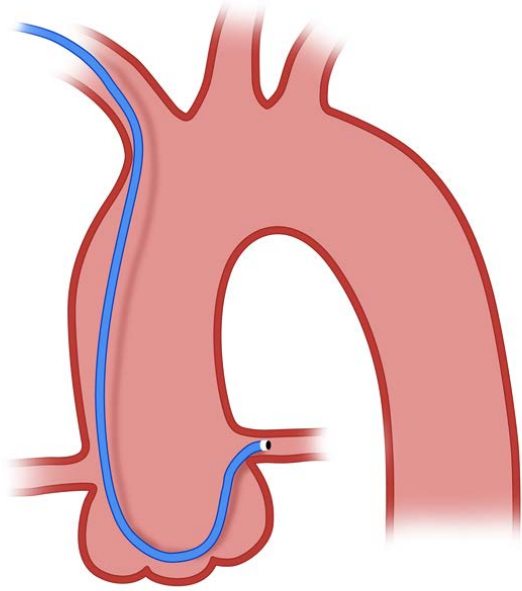
Dilated aorta: JL4-5-6, AL2-3

High take-off / aberrant: AL2 or AL3

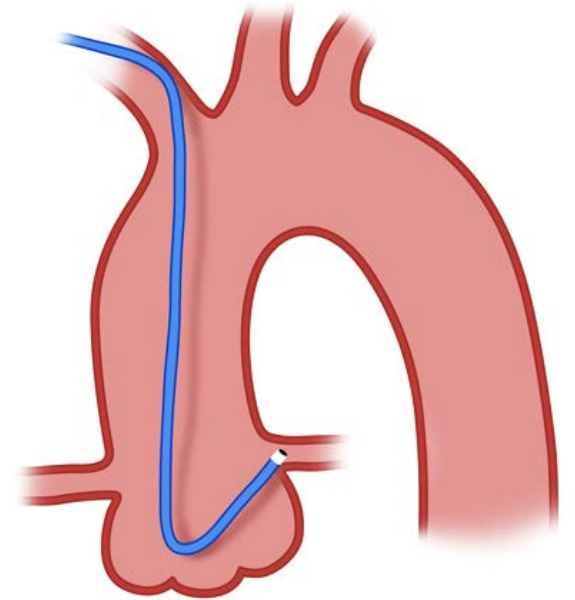
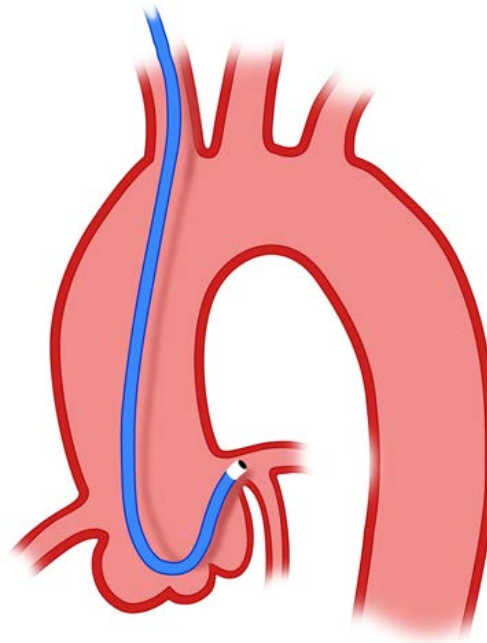
Distorted aorta: AL3 or MP

No reach: Extra back-up guide

Second choice catheters, LCA



AL



MP

extra back-up GC



Catheter exchange

It is preferable to keep the 0.035" wire in the ascending aorta

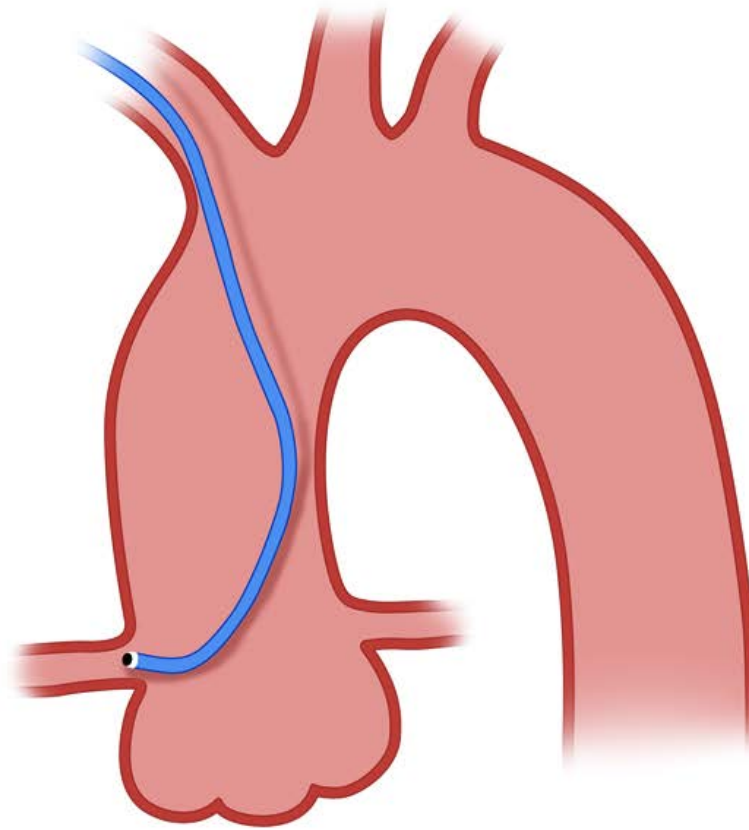
2 methods:

- Long (260cm) wire

- Standard wire

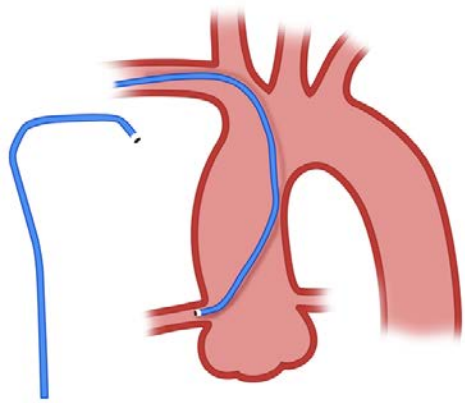
JR catheter

JR catheter for RCA

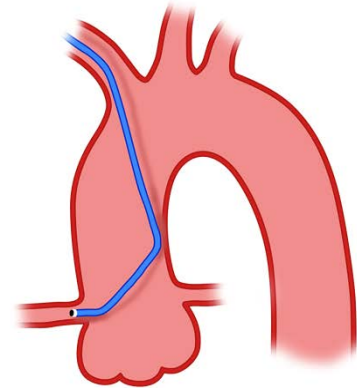
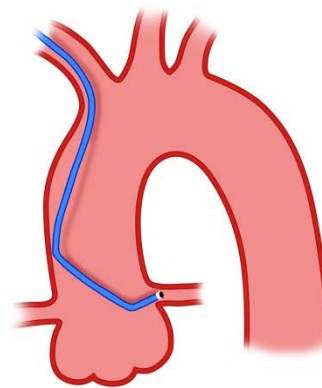
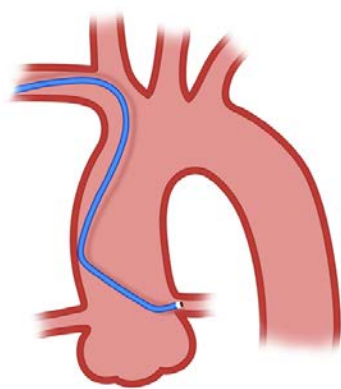




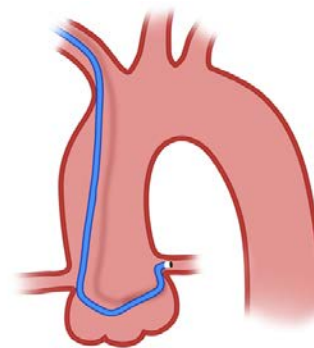
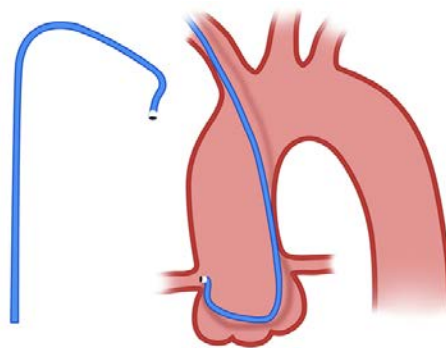
Dedicated catheters for both ostia



Tiger



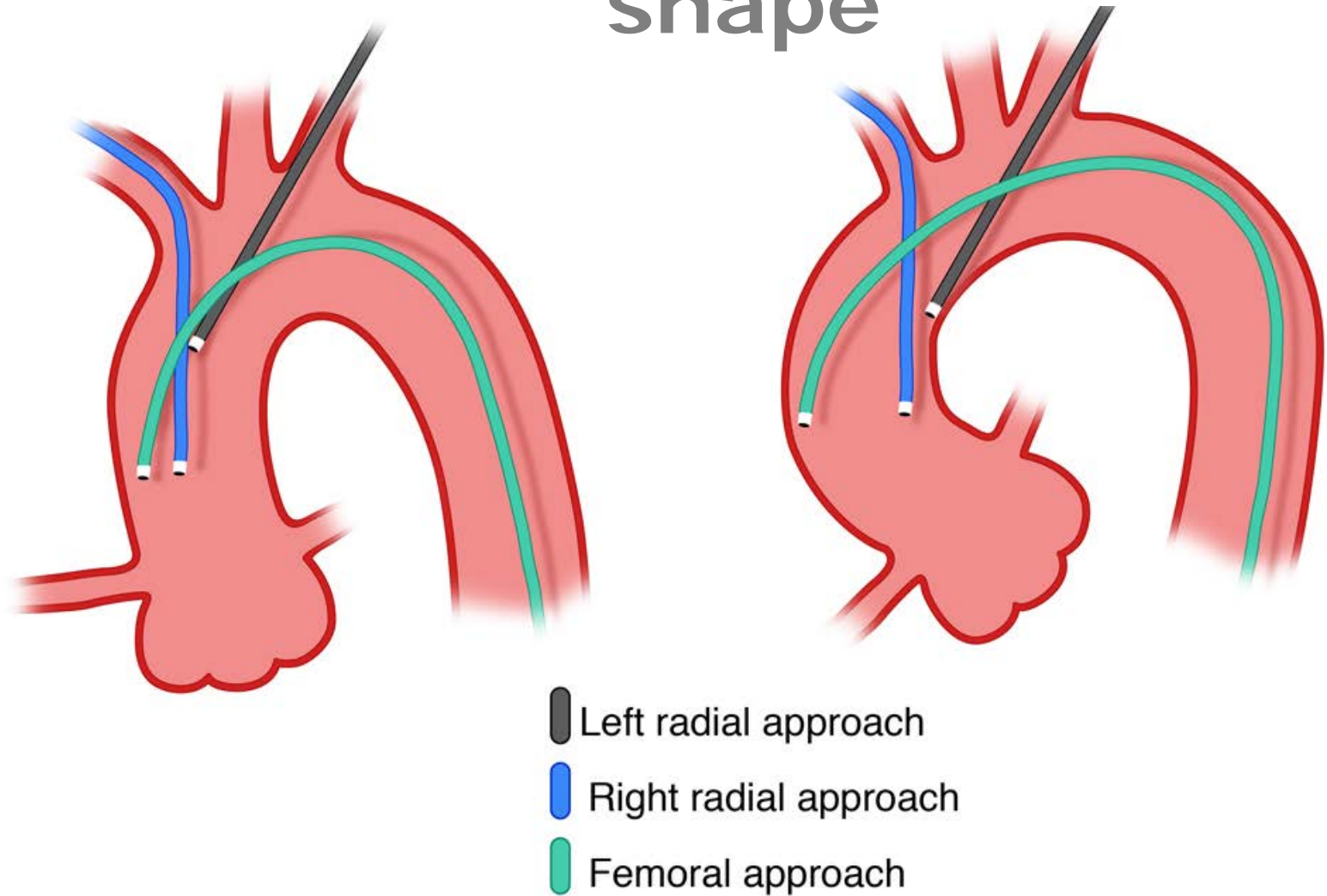
Barbeau



BLK



Catheter course according to vascular approach and aorta shape





Alternative catheters, RCA

High and anterior

AL1 or AR

Short aorta

JR 3.5

Inferior take-off

MP



Why standard catheters don't fit?

Short patient

Barrel chested

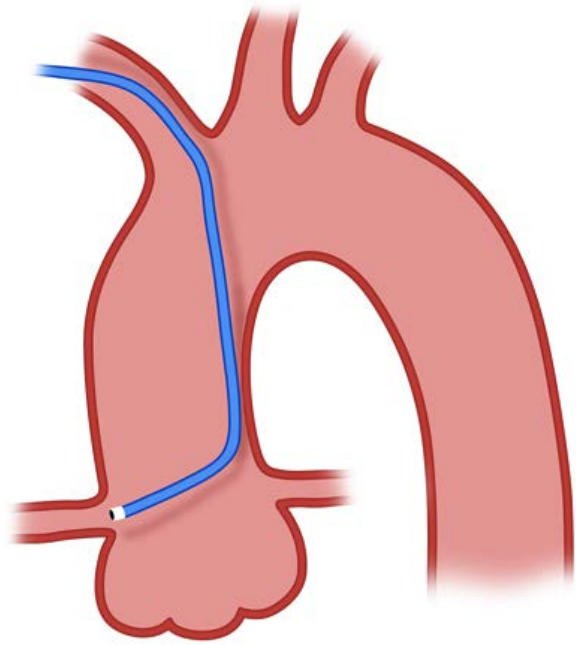
Sub-clavian tortuosity

Enlarged aorta

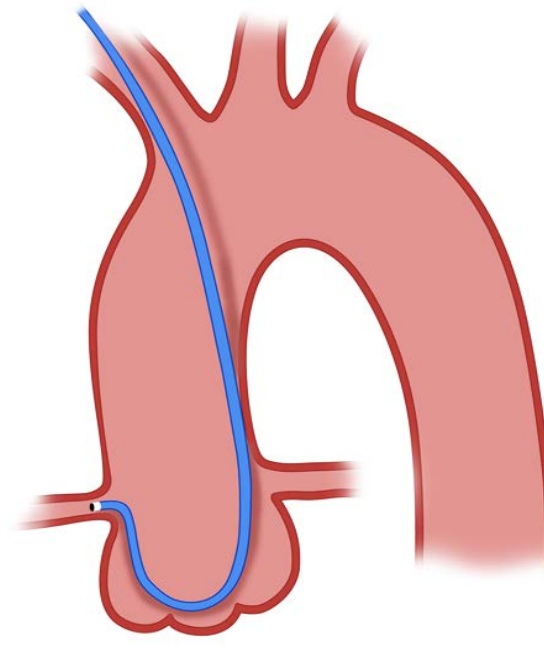
Extreme take-off

Aberrant origin

Alternative catheters, RCA



MP



AL



Key messages

Most diagnostic angiography can be done with standard catheters

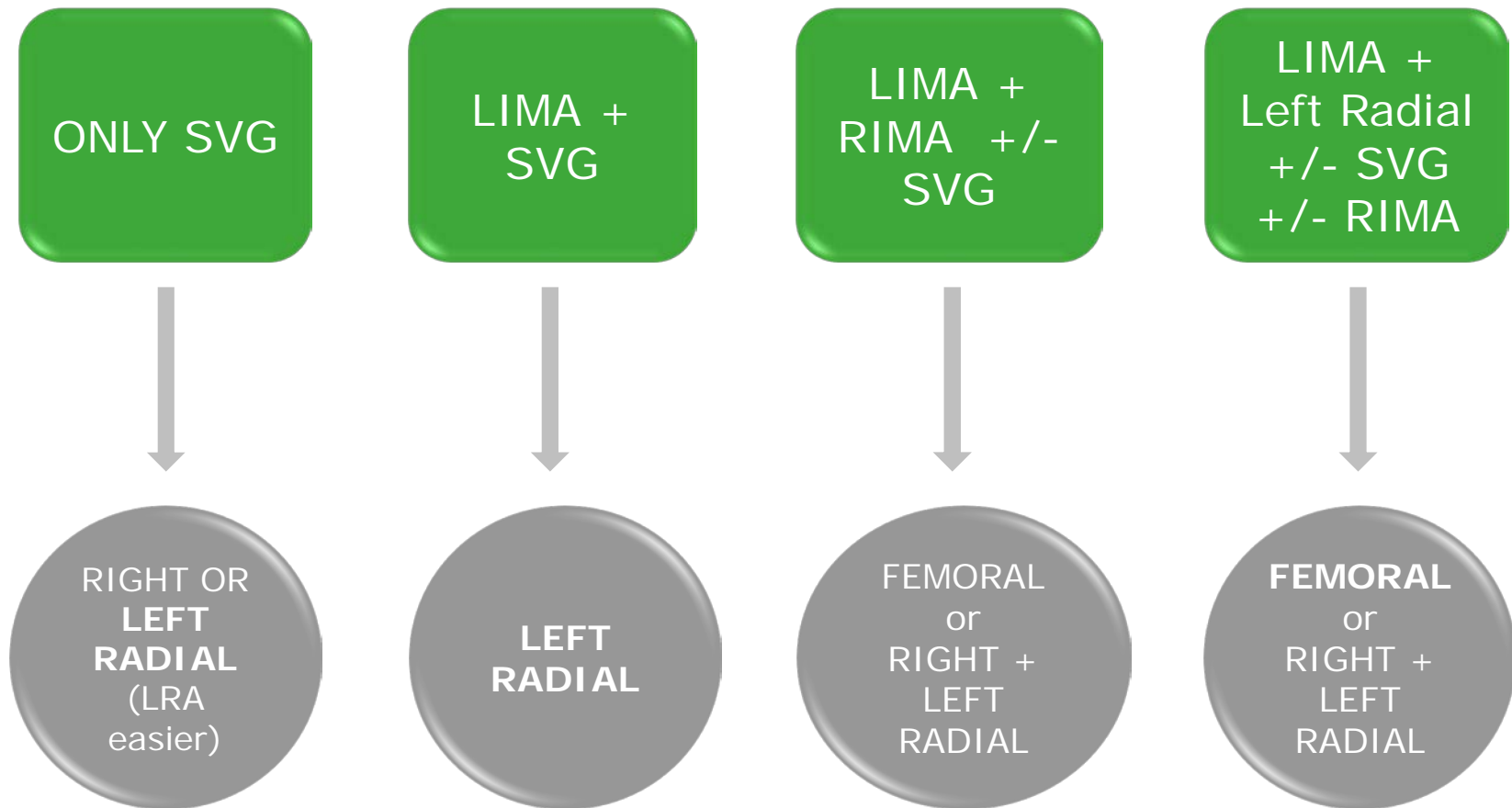
Gentle movements to avoid spam

LCA – JL3.5, different manipulation

RCA – JR4, similar manipulation

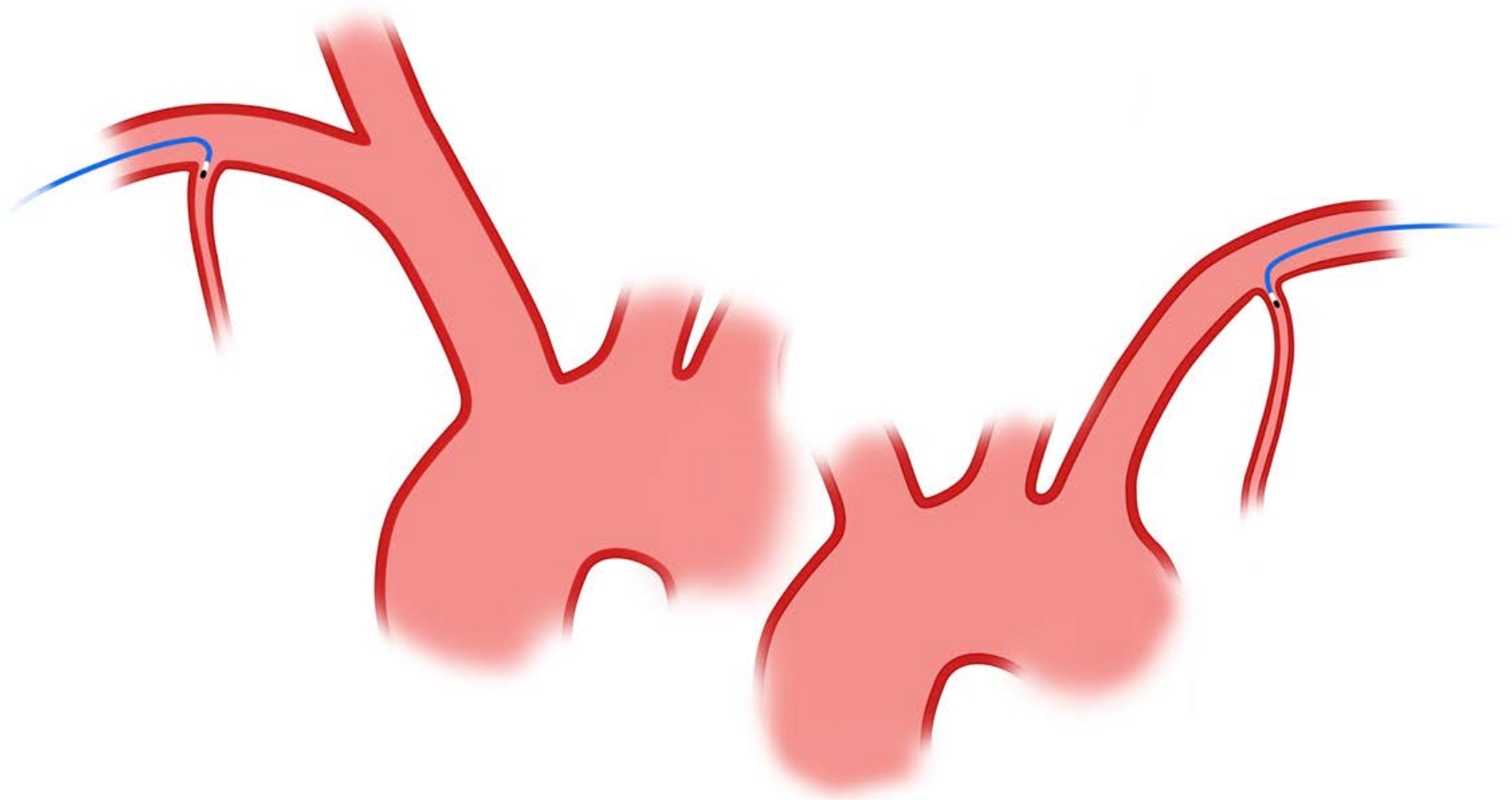


What is the preferred approach according to graft type?



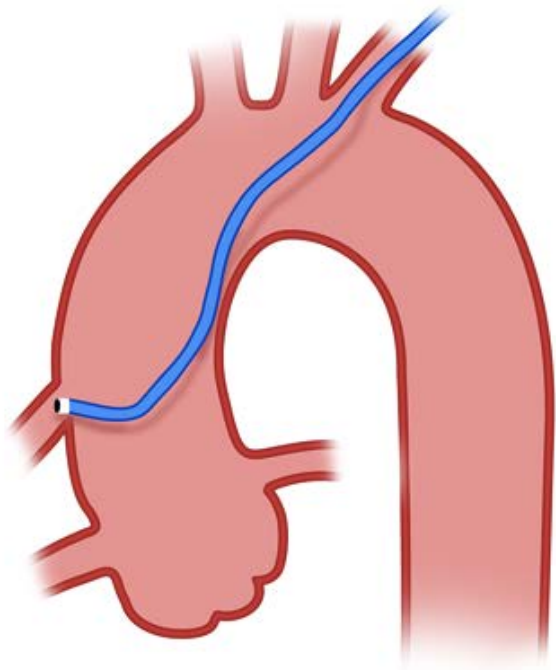


Homolateral IMA cannulation

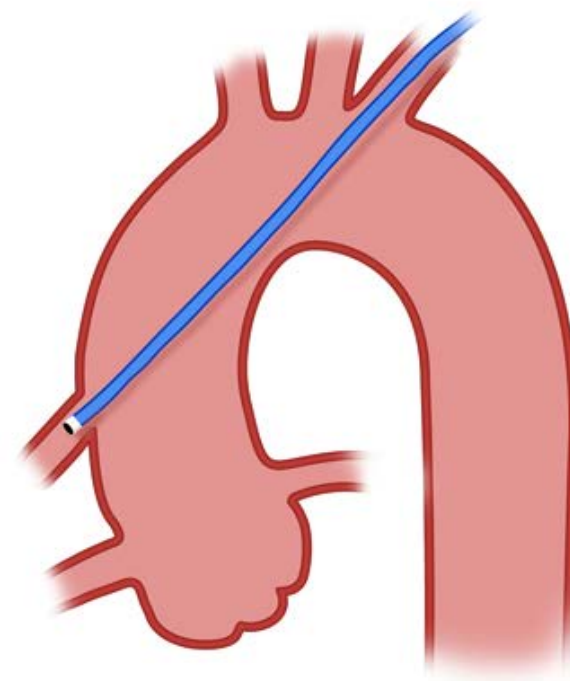




SVG to RCA

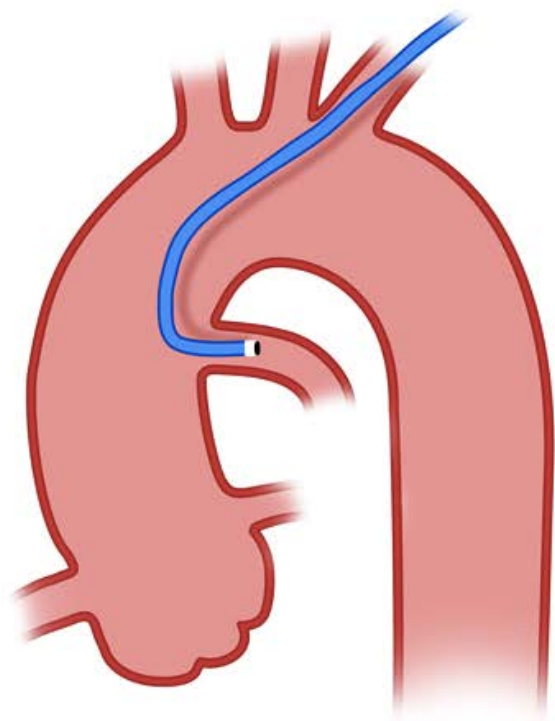


JR

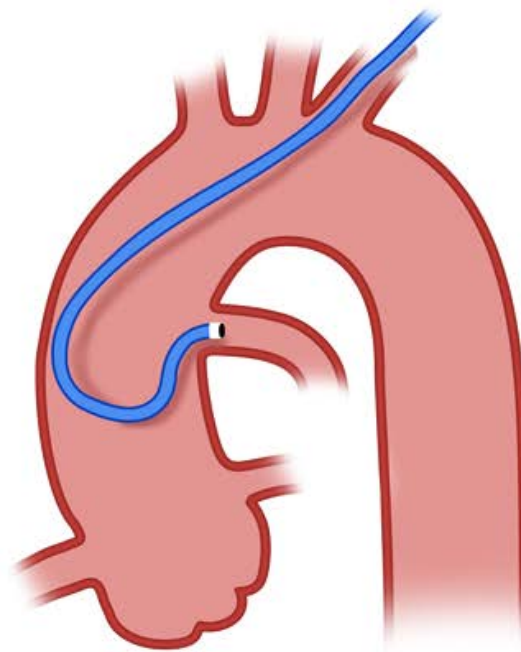


Multipurpose

SVG to LCA

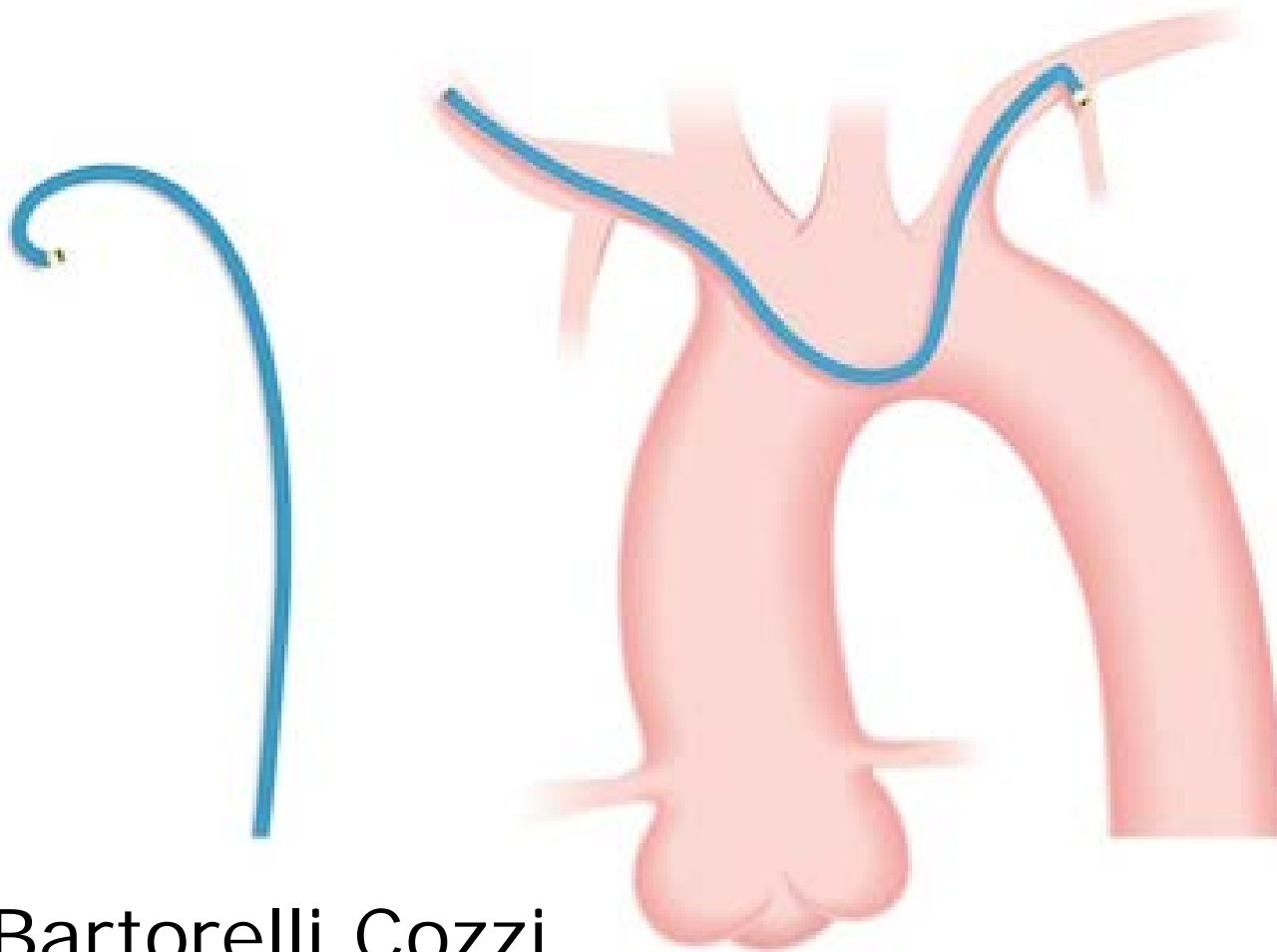


JR



AL

LIMA from right radial approach



IM Bartorelli Cozzi

LIMA → IM or IM Bartorelli Cozzi

R-SVG → JR4 or MP

L-SVG → AL1-AL2



Selecting a guide catheter for LCA

Extra back-up curves shapes suit most cases
(EBU / XB / Voda / CLS)

Judkins: easy but poor support

LCX lesions: Amplatz might help but tricky



How to engage with EBU shape?

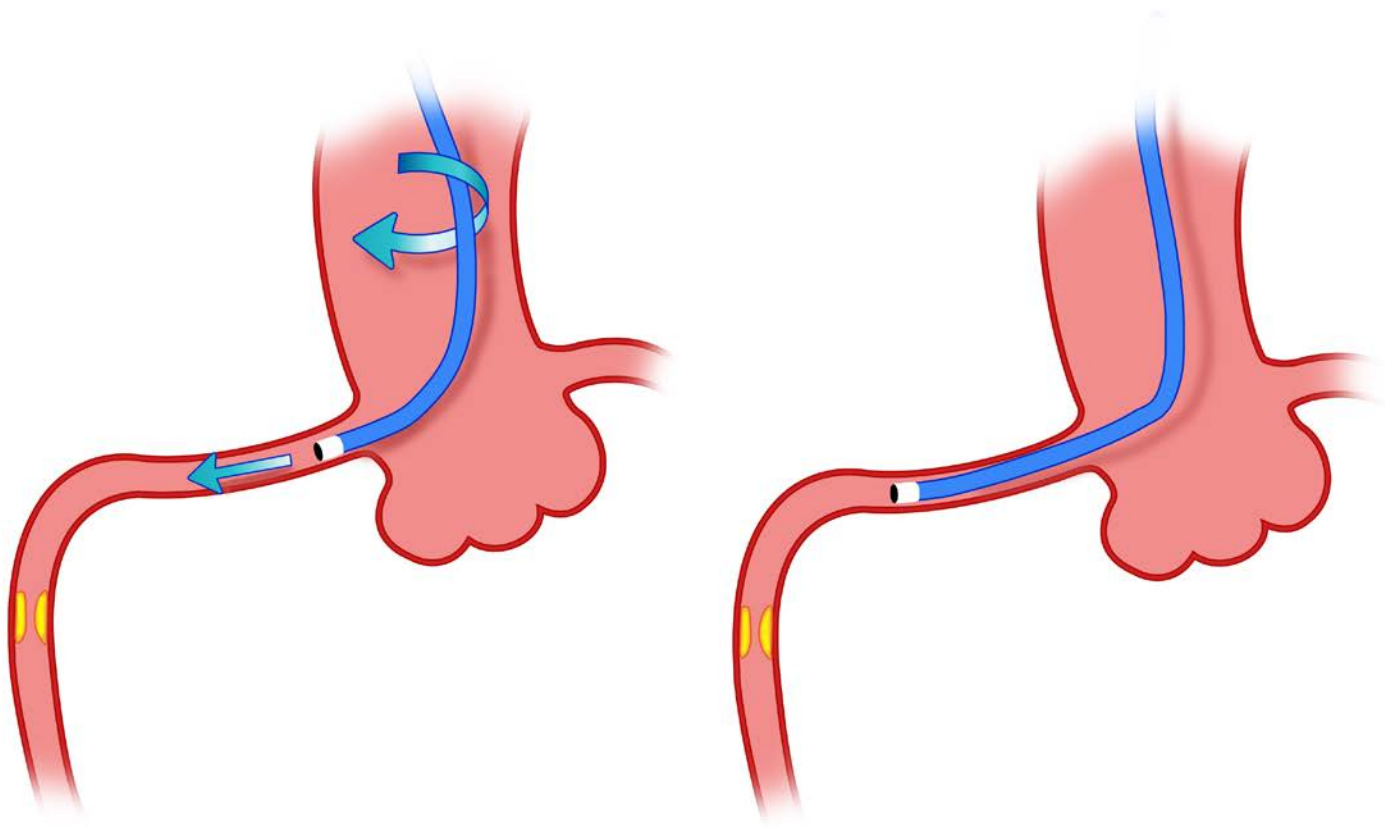
Catheter usually falls into non-coronary sinus

Pull gently, it will fall into the left coronary sinus (asking the patient to take a deep breath helps)

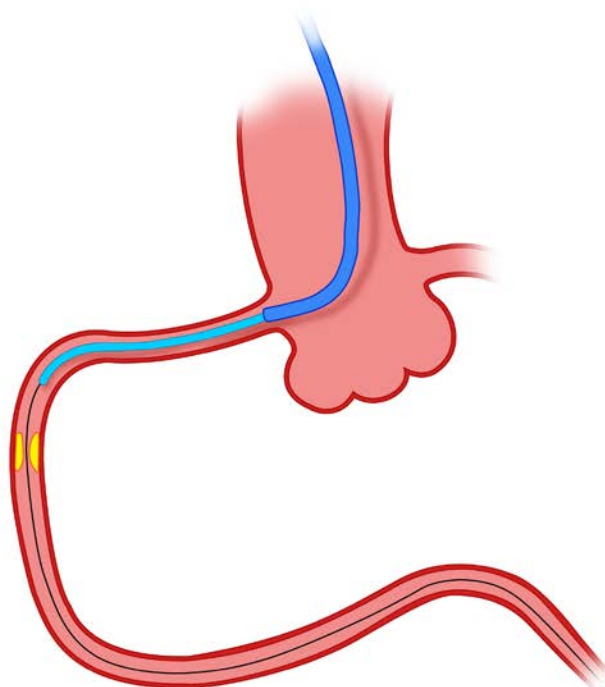
Once the catheter is in the left coronary sinus, turn anti-clockwise and advance

Deep intubation

Deep intubation With JR

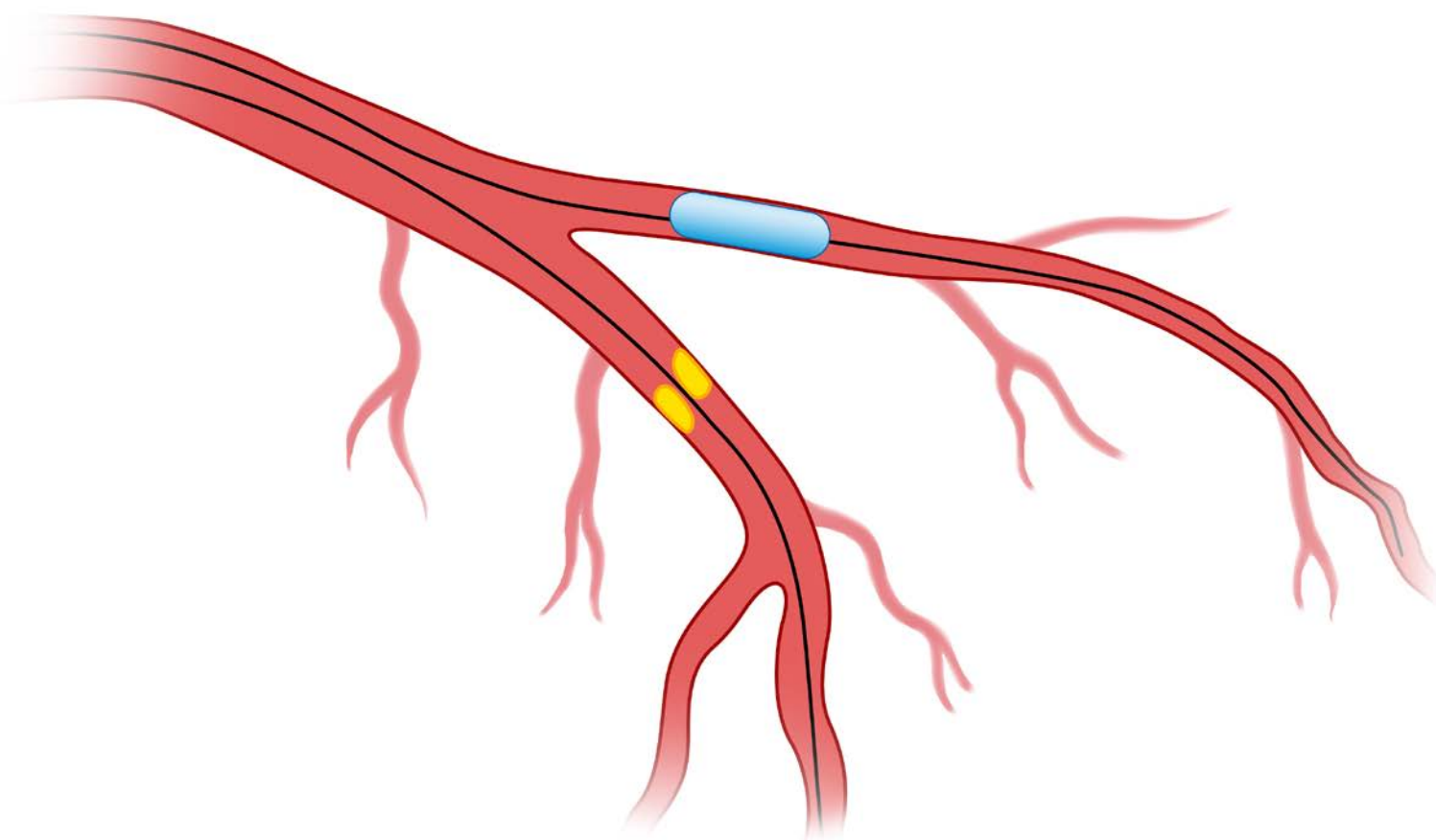


5 in 6



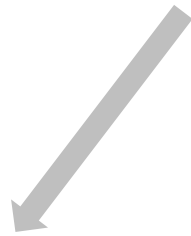
Anchoring balloon

Anchoring balloon





2 ways how to improve support?

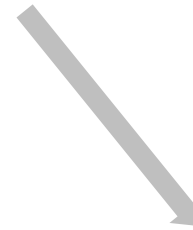


Passive support

GC with back-up support

7Fr or 8Fr GC

Anchoring balloon



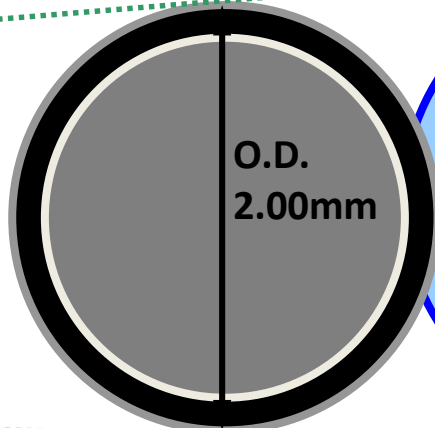
Active support

Deep intubation

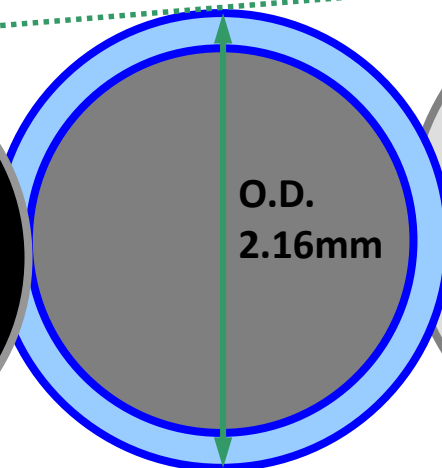
GC extensions:
5 in 6F

Over the wire

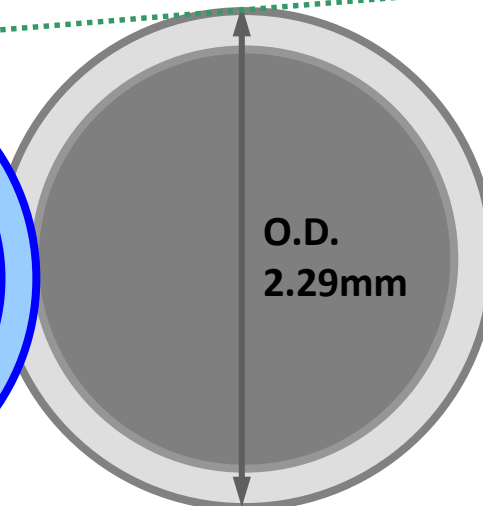
6.5Fr



4Fr Sheath Introducer

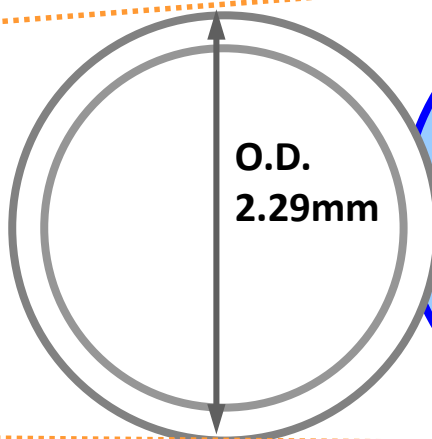


6.5Fr / 0.058"
SheathLess

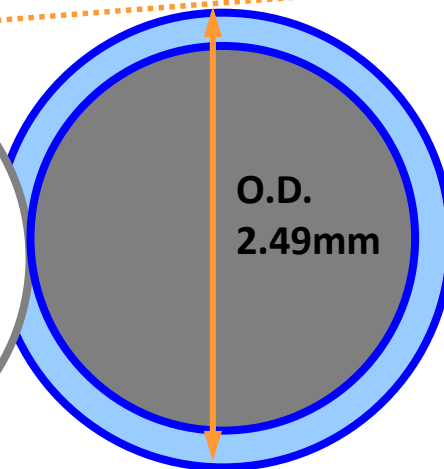


5Fr Sheath Introducer

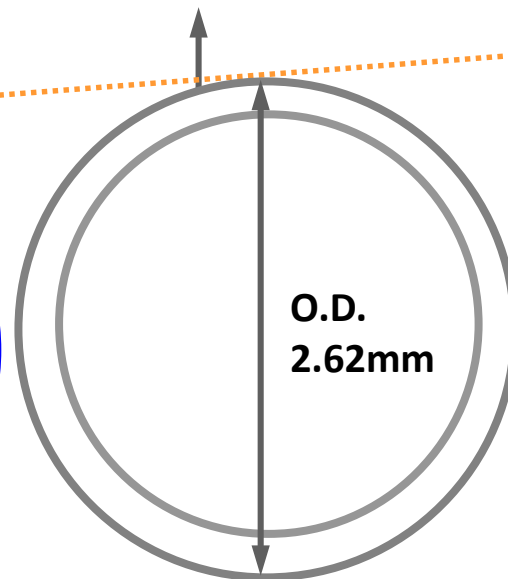
7.5Fr



5Fr Sheath Introducer



7.5Fr / 0.070"
SheathLess

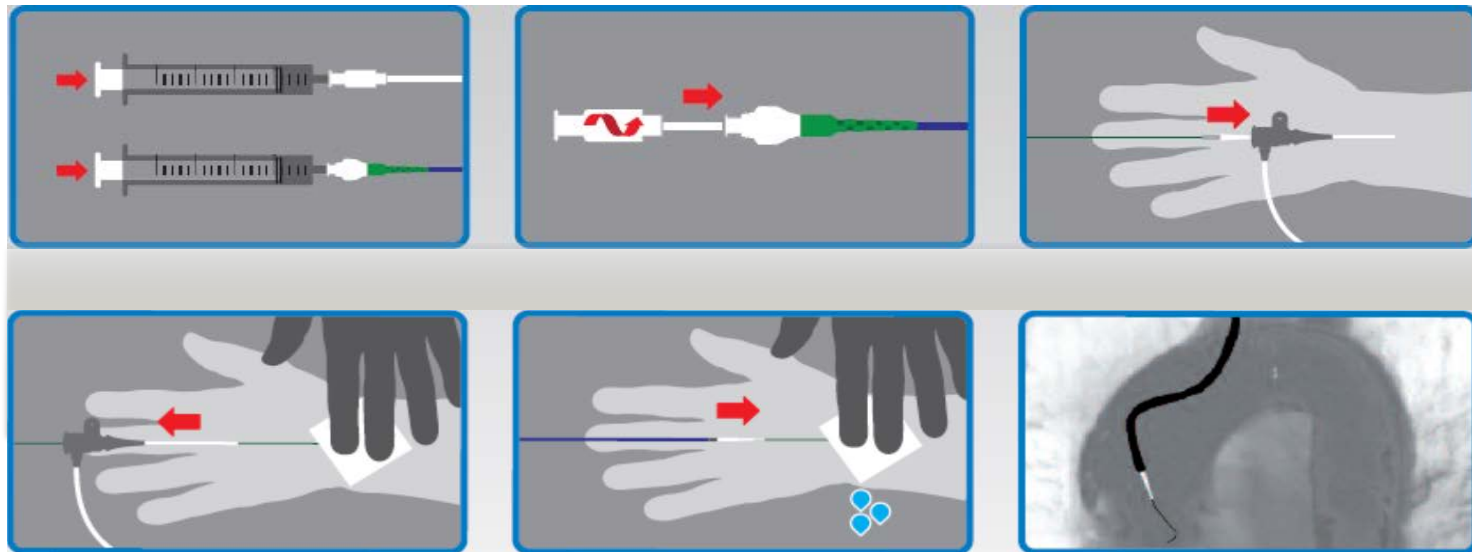


6Fr Sheath Introducer

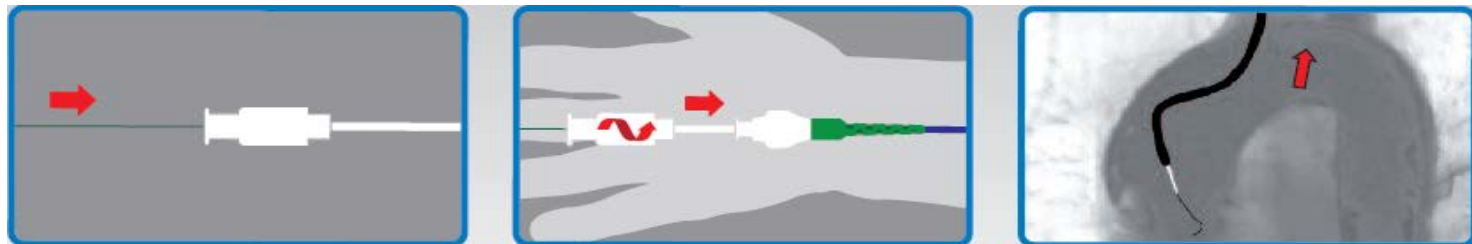


How to use sheathless GC?

Introducing:



Removing:





Key messages – Radial PCI

Similar guiding catheters to femoral PCI,
choice based on angiography

Support might be insufficient, especially for
the RCA

A few techniques & catheters will help