

How to improve my support during complex PCI: step-by-step approach

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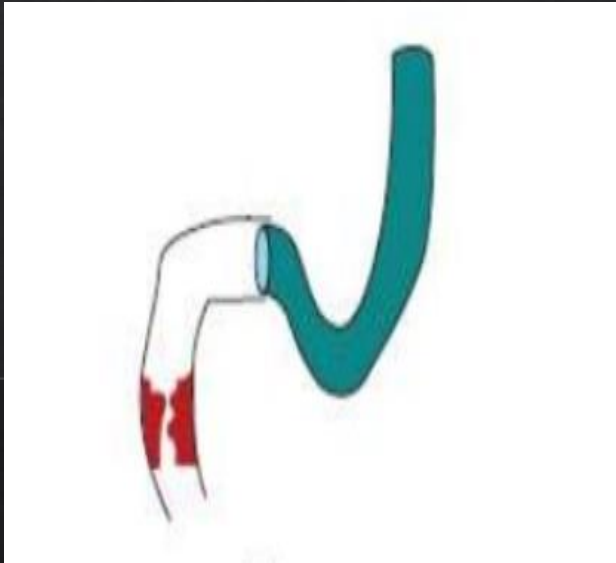
PCI support techniques and tools

1. Guiding catheters support
2. Wire based techniques
3. Balloon based techniques
4. Guide extension catheters

Guiding catheter support

Passive support

- ◇ Larger diameter (7/8F)
- ◇ Well seated at the coronary artery ostium
- ◇ LM : Extra back up / Amplatz left 2
- ◇ RCA : Amplatz left 2 / MAC



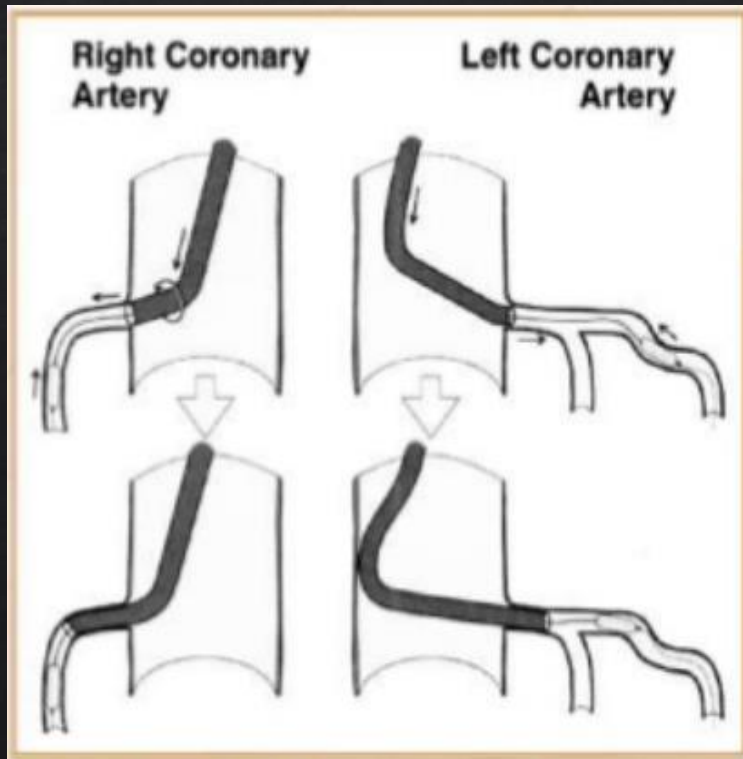
Active support

- ◇ Smaller diameter (5/6F)
- ◇ Deep intubation in the coronary artery



Guiding catheter active support

- ◇ Gentle rotation over the rail (previously inserted guide wire and balloon)
- ◇ RCA - clockwise (JR or MP)



Limitations:

- ◇ Disease free ostium and proximal segment
- ◇ Pressure dumping
- ◇ Significant myocardial ischemia
- ◇ Proximal segments dissection

• Direction of torquing



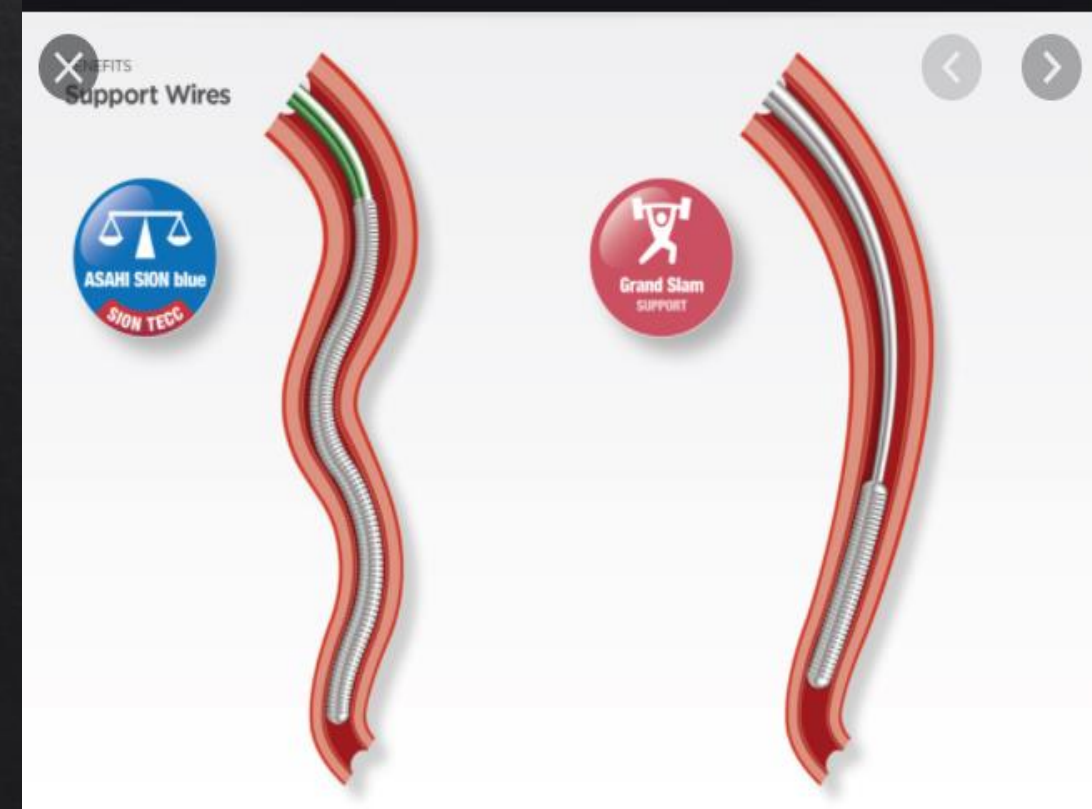
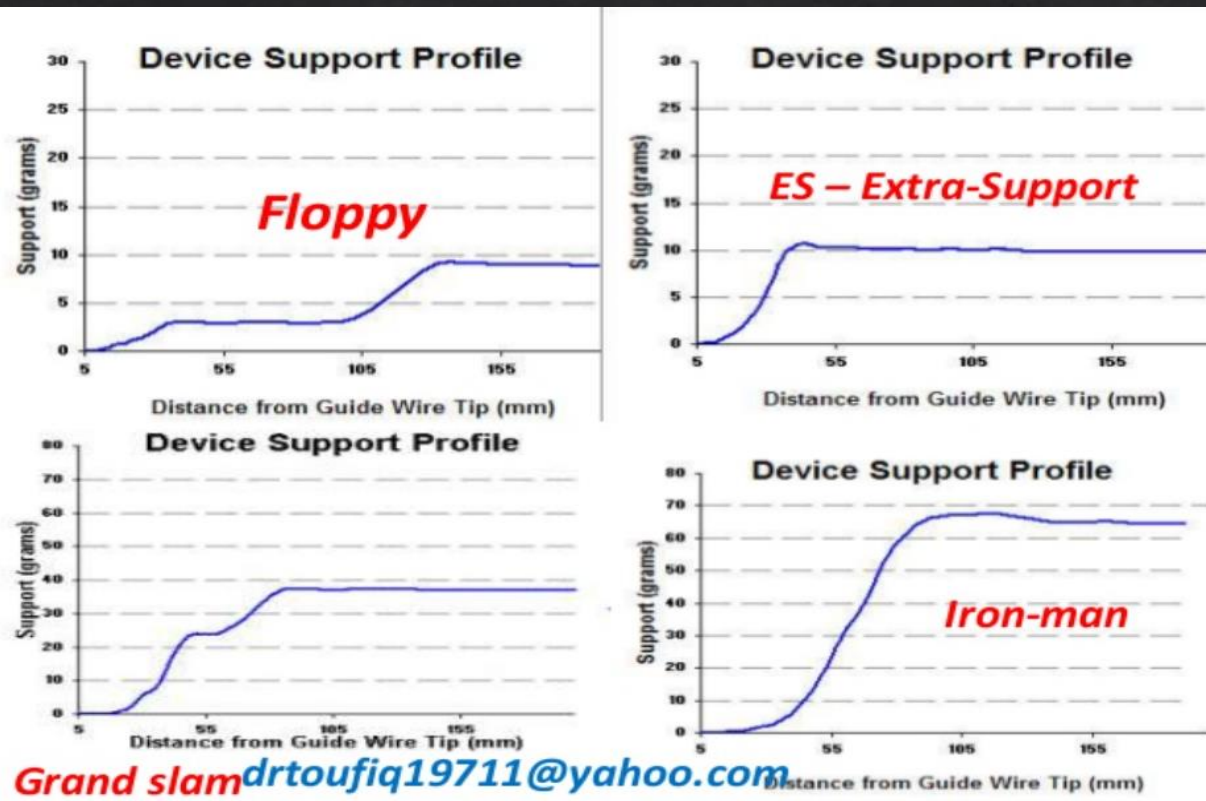
Toward the LAD -
Counter-clockwise rotation



Toward the LCX and RCA -
Clockwise rotation

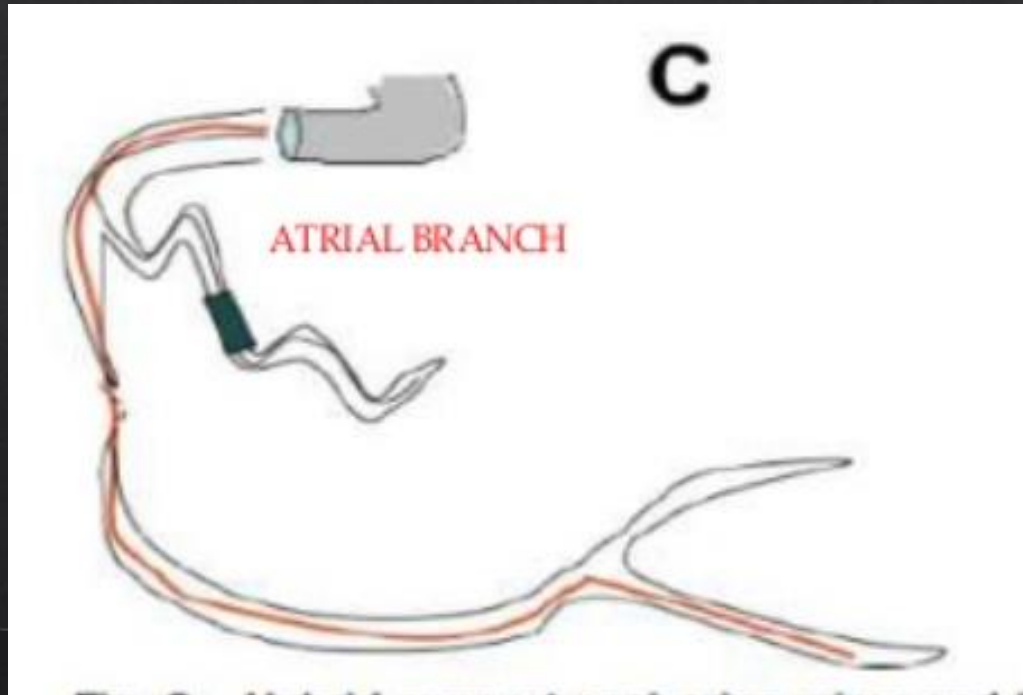
Wire based techniques

- ◇ Distal wire position
- ◇ “Buddy” wire- Selig (Cathet Cardiovasc Diagn 1992;25:331-335)
- ◇ Extra support wires- Choise PT extra support, IronMan , Grand Slam

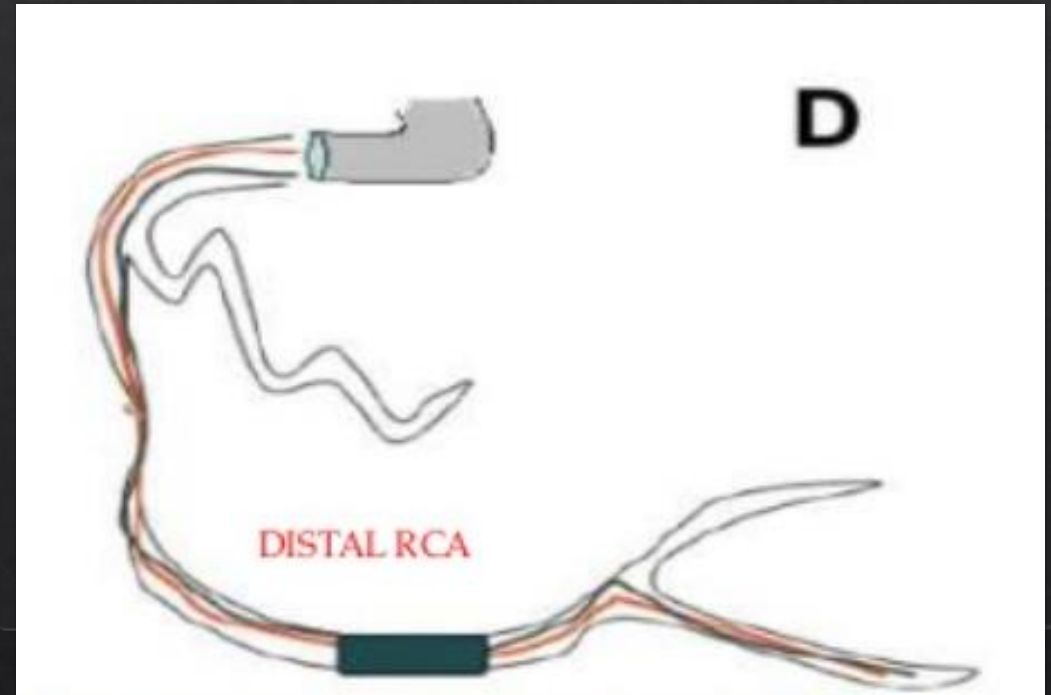


Balloon based techniques

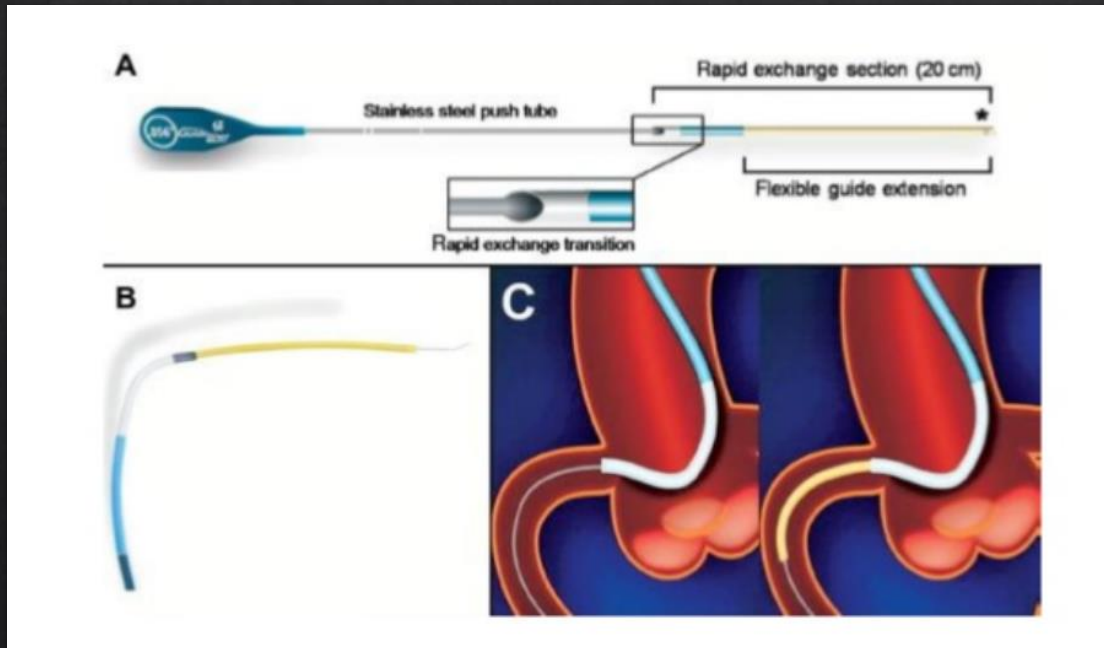
Side branch anchoring



Distal anchor technique



Guide extension catheters



Distal anchor to insert Guideliner, staged stent insertion

Clip slide

Guideliner advanced through proximal obstruction

1.

Guide locked in position allowing increased force on Guideliner before displacement 6F

Balloon inflated in distal vessel

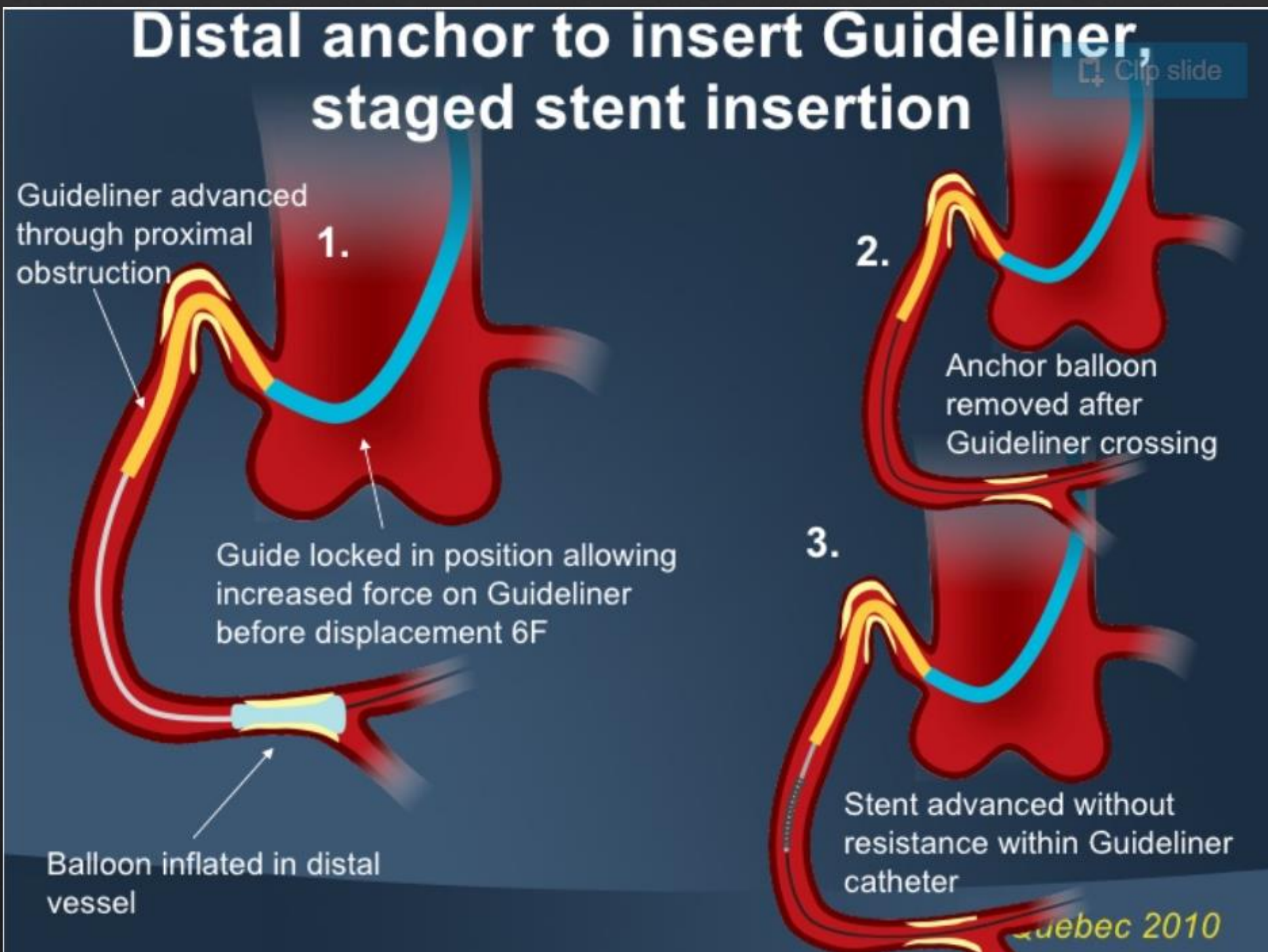
2.

Anchor balloon removed after Guideliner crossing

3.

Stent advanced without resistance within Guideliner catheter

Quebec 2010



Take Home Messages

- ◆ The support is crucial for challenging cases
- ◆ Guiding catheter exchange
- ◆ Knowledge about different wire types is extremely important
- ◆ Extension catheter techniques could first option /cost+