

CAS Access: Tips, Tricks, and When to Walk Away

With Case Illustrations....

D. Chris Metzger, MD, FSCAI, FACC

Wellmont CVA Heart Institute

Kingsport, TN, USA



@

tct 25



Disclosure Statement of Financial Interest

Within the past 12 months, I or my spouse/partner have had a financial interest/arrangement or affiliation with the organization(s) listed below.

Affiliation/Financial Relationship

- Grant/Research Support
- *Consulting Fees/Honoraria*
- Major Stock Shareholder/Equity
- Royalty Income
- Ownership/Founder
- Intellectual Property Rights
- Other Financial Benefit
- *National PI*
- *National Co-PI*

Company

- None
- *Abbott, IDEV, Cordis, Medtronic, Boston Scientific*
- None
- None
- None
- None
- None
- None
- None
- *CANOPY*
- *SAPPHIRE WW*

BEFORE We Talk About Accessing Difficult Carotids, Remember.....

- **ALWAYS Assess Arch First!**
- For difficult anatomy, reconsider the R/B ratio & options of CEA or Med Rx!!
- ***Be especially careful with diffusely diseased, calcified arches & carotids***
- Increased manipulation, force, time, & disease traversed = ↑ emboli = ↑ strokes!
- OK to stop if can't access carotid





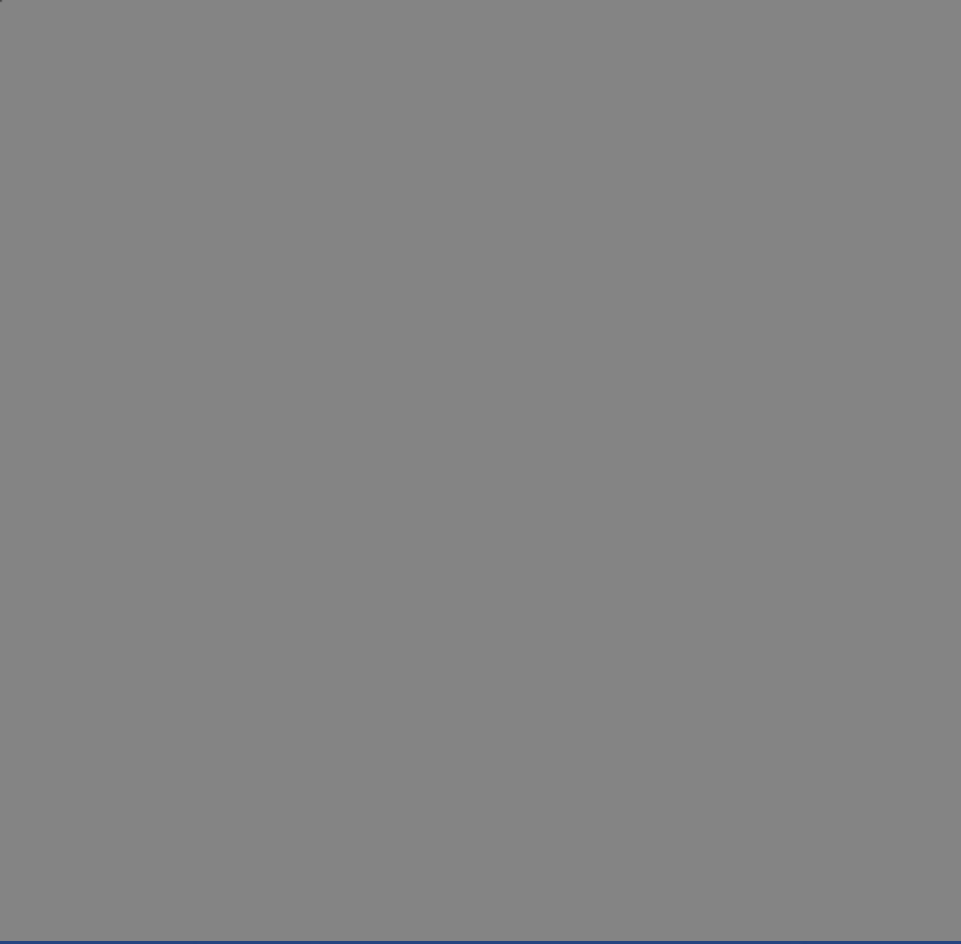
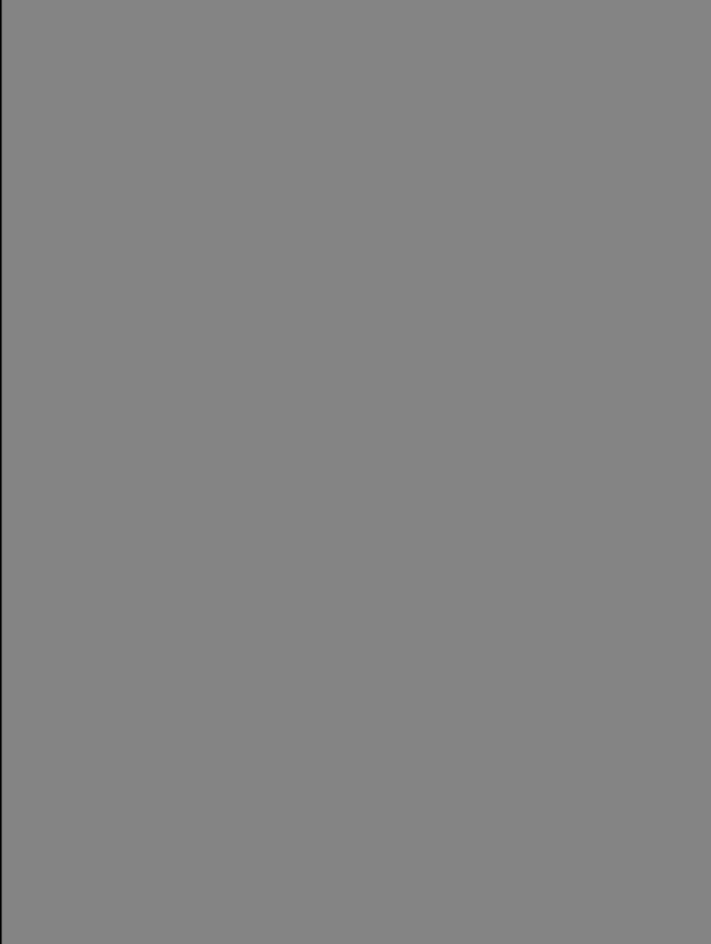




Considerations for CAS in Challenging Arches (IF R/B OK)

- Is there clear path to ECA? Roadmap!
 - 20° RAO, 20° Caudal for RCCA/RSCA Bif
- Anticoagulate *early* (*bivalirudin for us*)
- Place Guide (CBL) > Sheath *early*
- Familiar w/ neuro dx's (Vitek, Simmons)
- Proximal protection works well! (stable)
- ICA anatomy may change w/ sheath in!
- Careful not to allow prolapse of guide

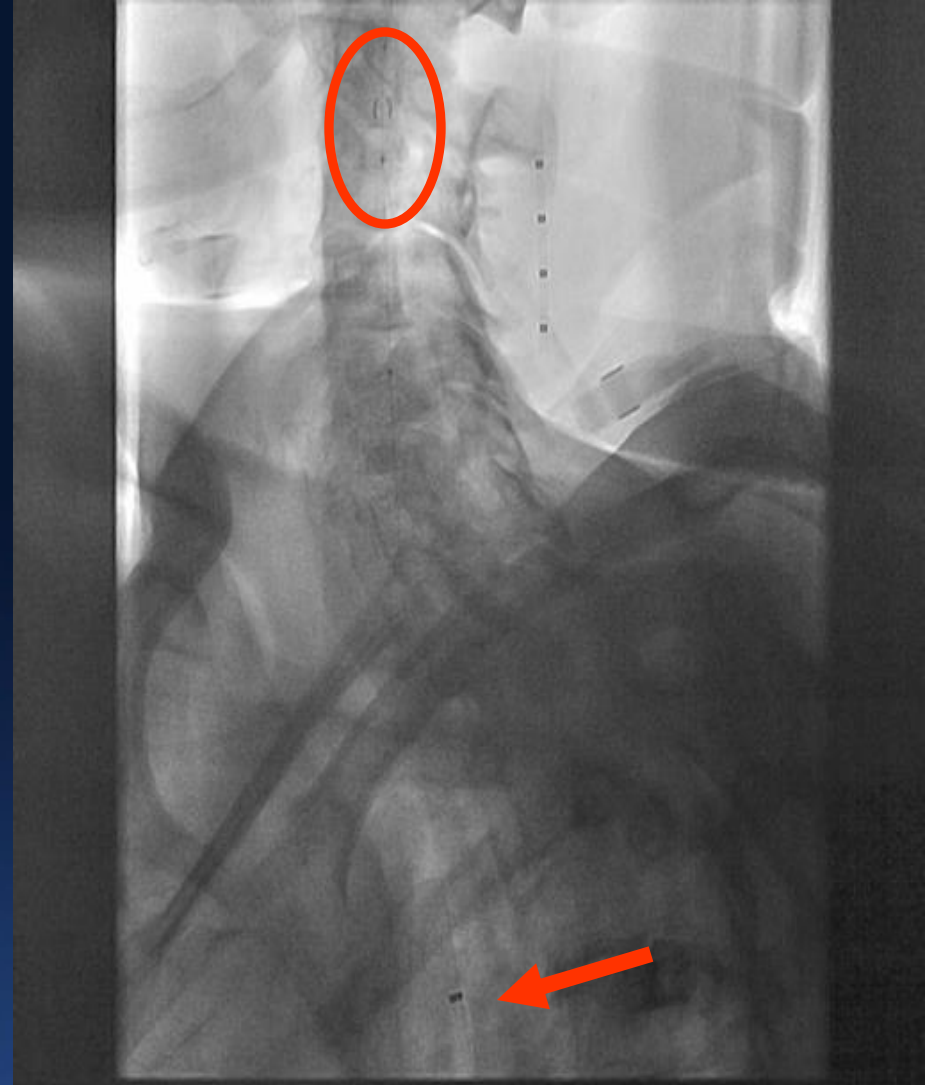
Unique Arch Issues



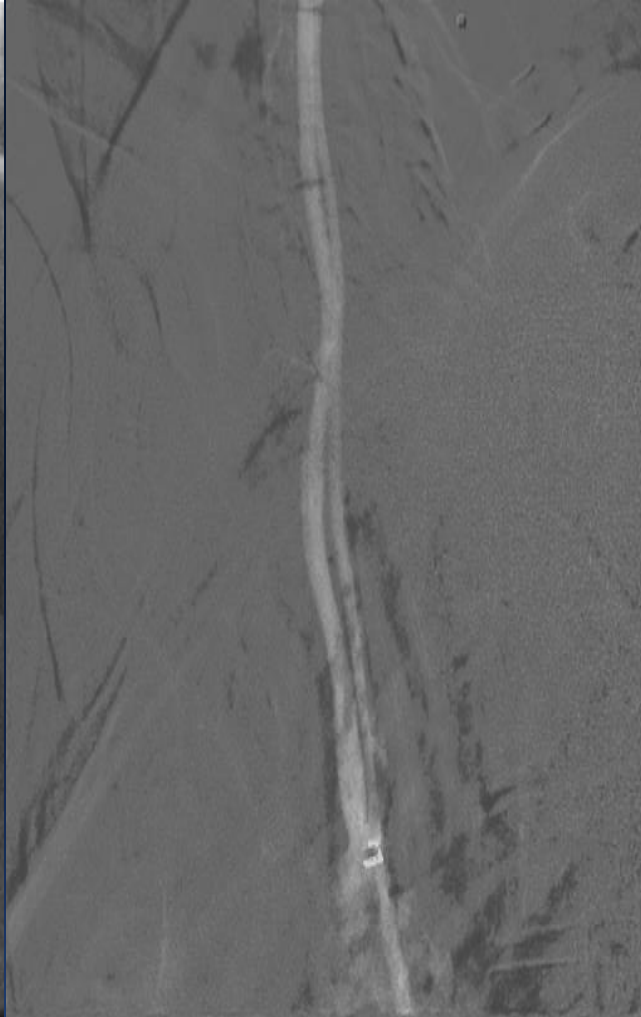
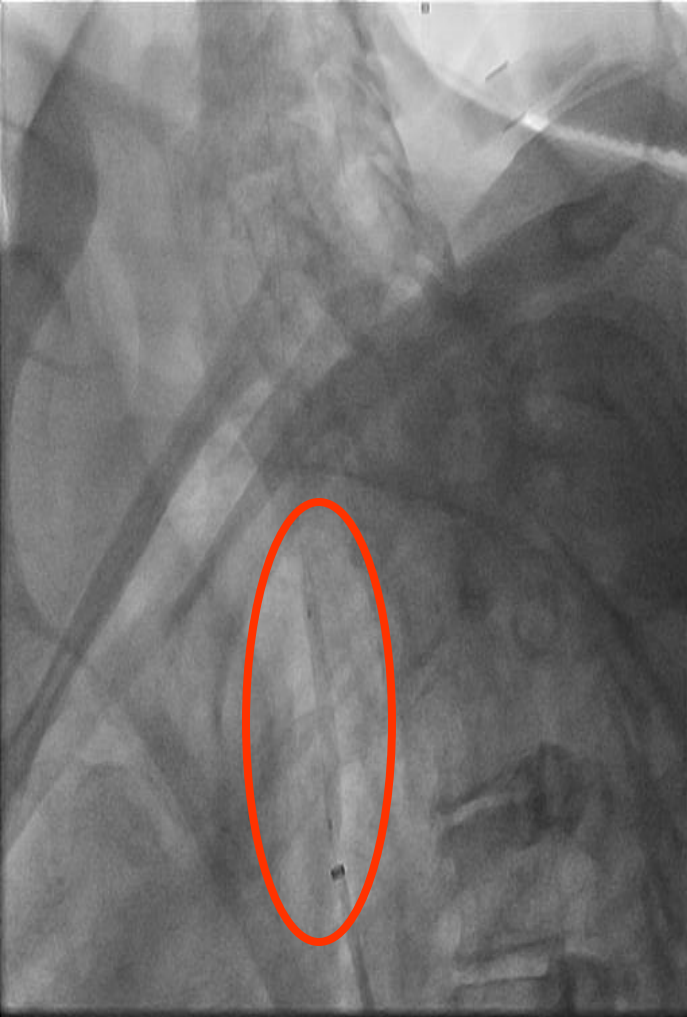


XC length barewire thru vert

Shuttle close over vert



Nav6 Advanced..



tct 25

 CARDIOVASCULAR
RESEARCH
FOUNDATION



Type 3 Arch WITH ECA patent





Anticoagulated & Guide cath in EARLY



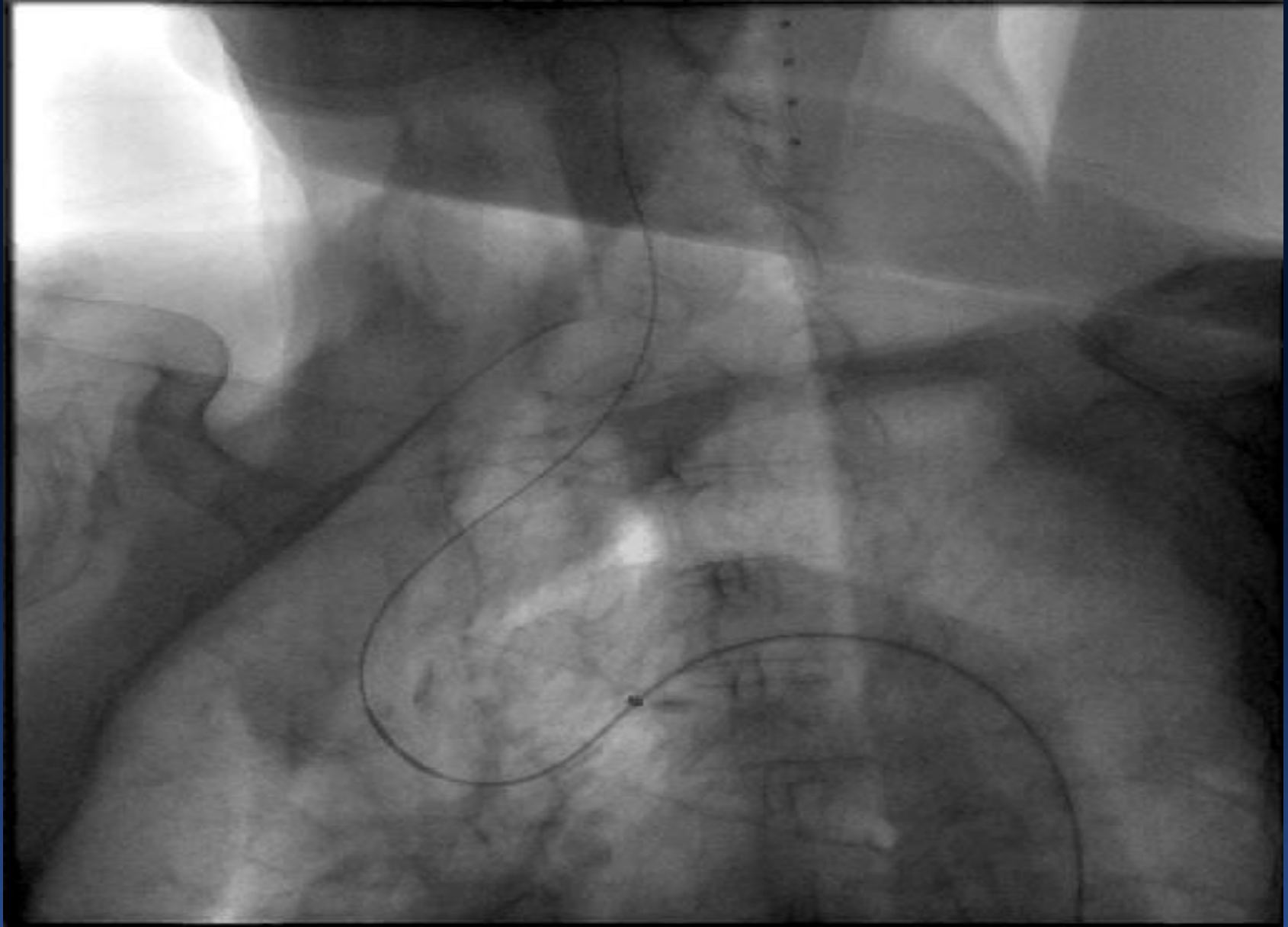
Guide

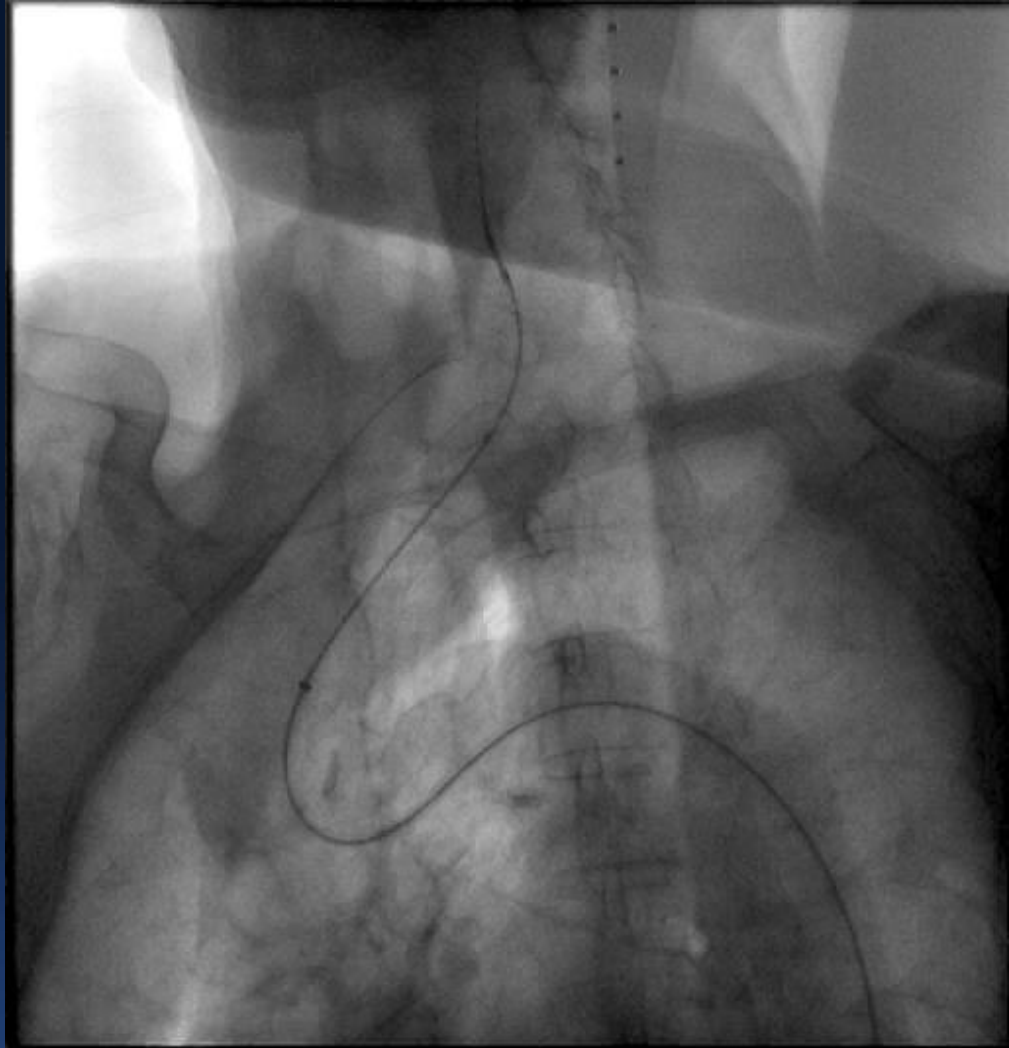
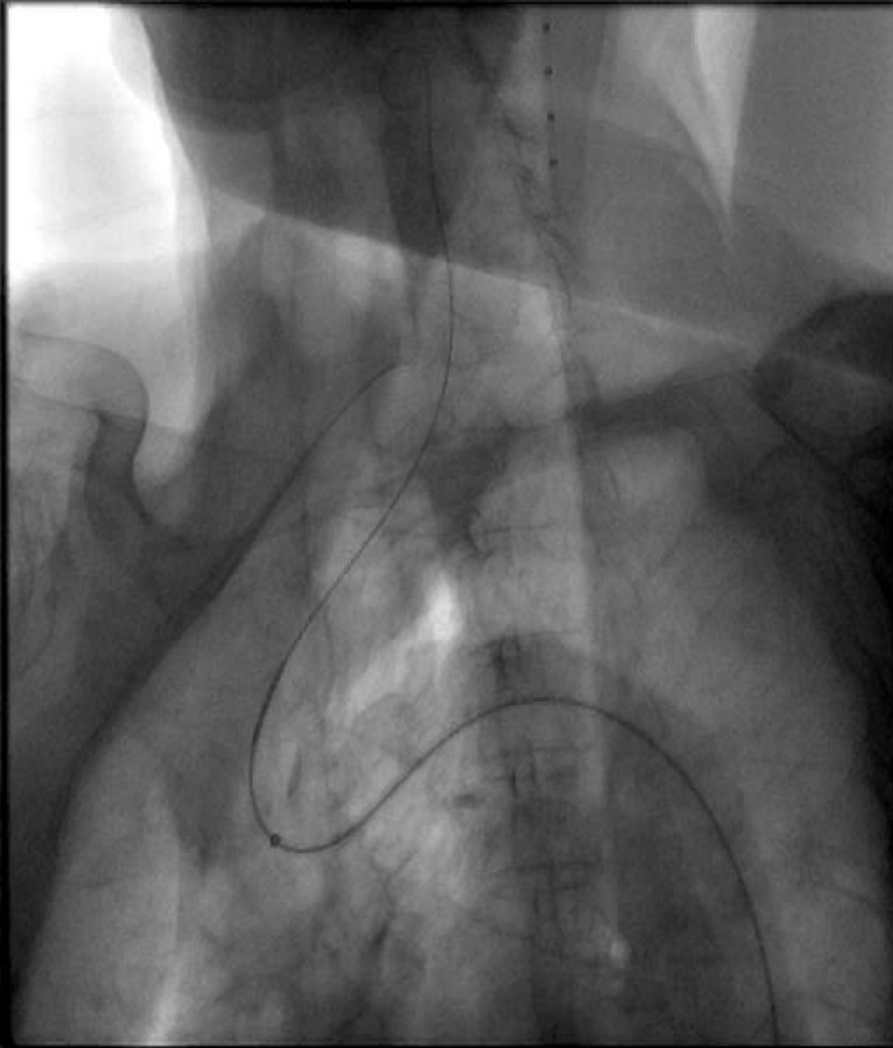
Final Angio

Type 3+ Arch WITH ECA Option



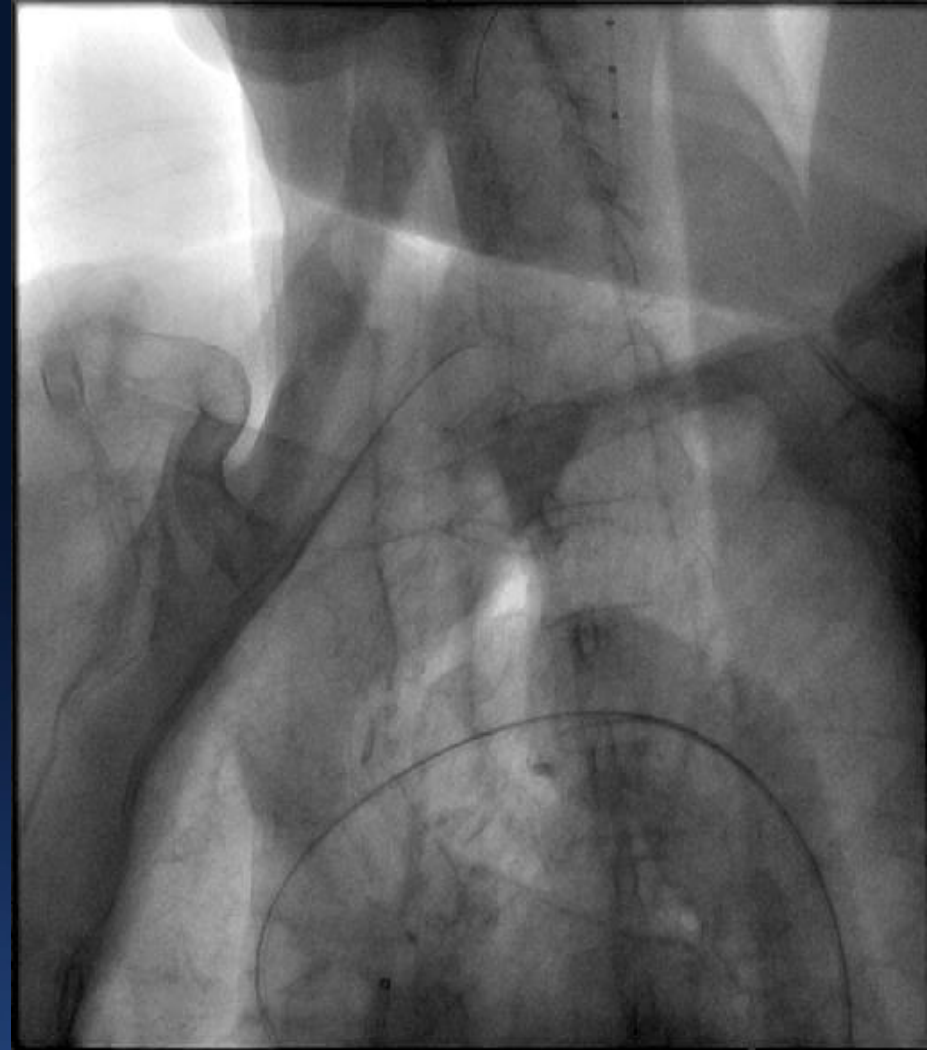
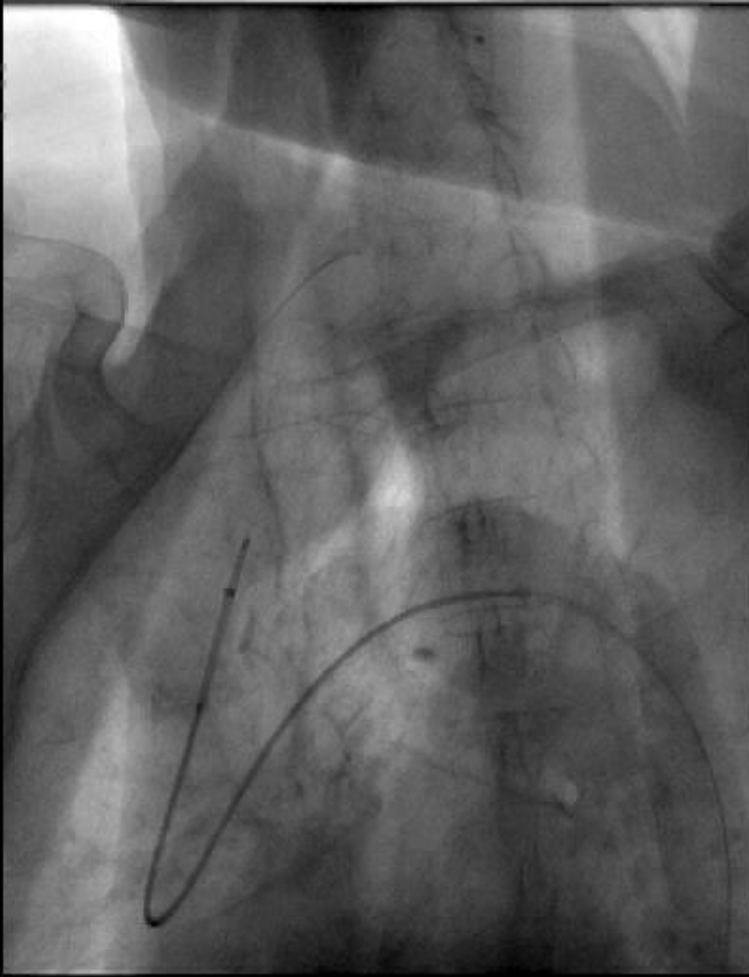
Wire ECA with Sheath in CCA





Advance Vitek Catheter

Advance Shuttle Sheath



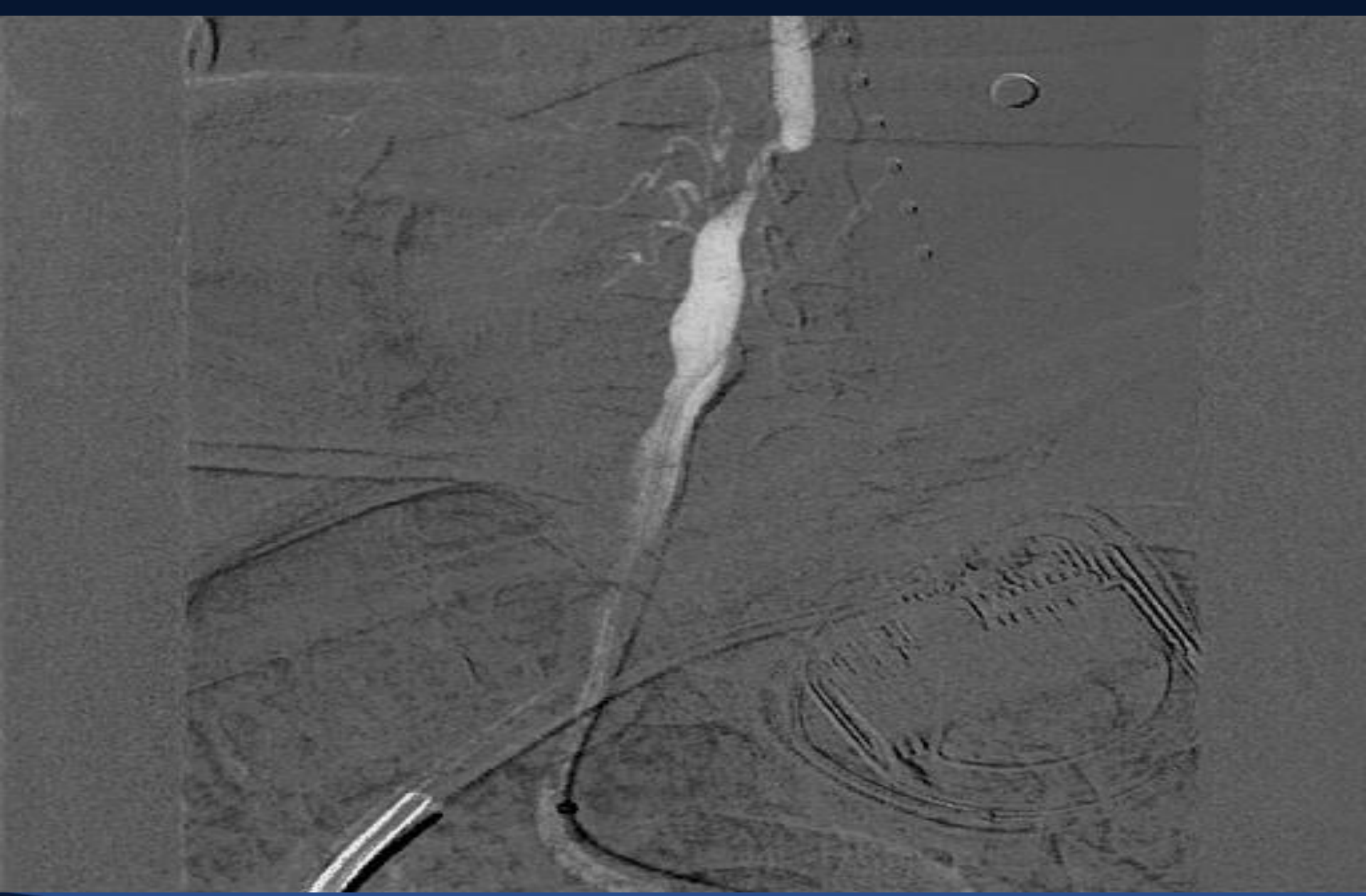
BE Careful advancing equipment, especially with sheath!

Before.....

After 😊

Bovine Arch with No ECA Option





Guide- PRE

Post

Tortuous Vessels with Low, Diseased Bifurcation



RAO 20, Caudal 20 (“Barbara Walters”) Roadmap



Sheath carefully over cath/GW

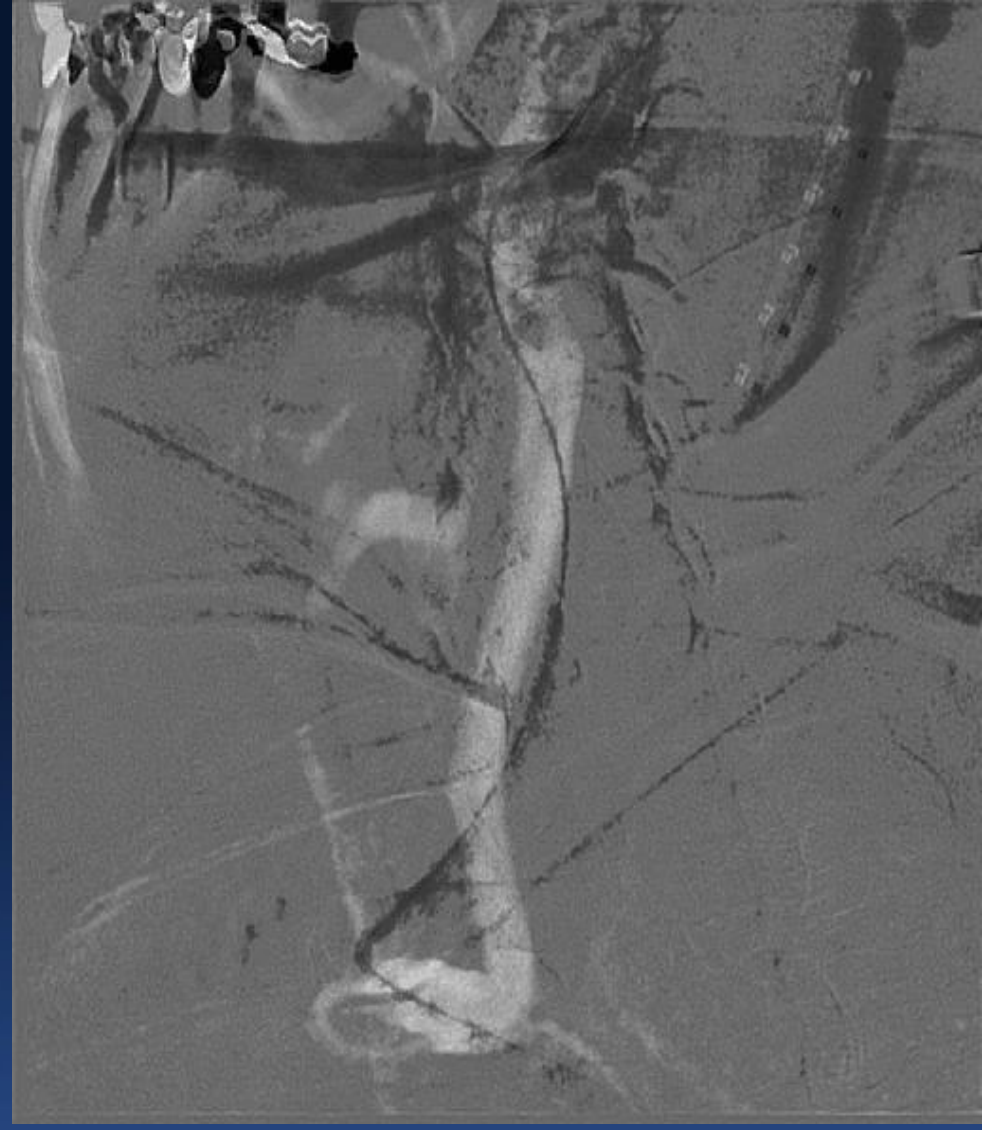
Severely Angulated Bovine LCCA Roadmap CCA, wire ECA



Note: No Ca++ or disease in CCA...



Roadmap, CBL guide in arch, Vitek in CCA



Vitek into ECA w CBL support

CBL guide up over Vitek, GW

Guide- PRE

POST

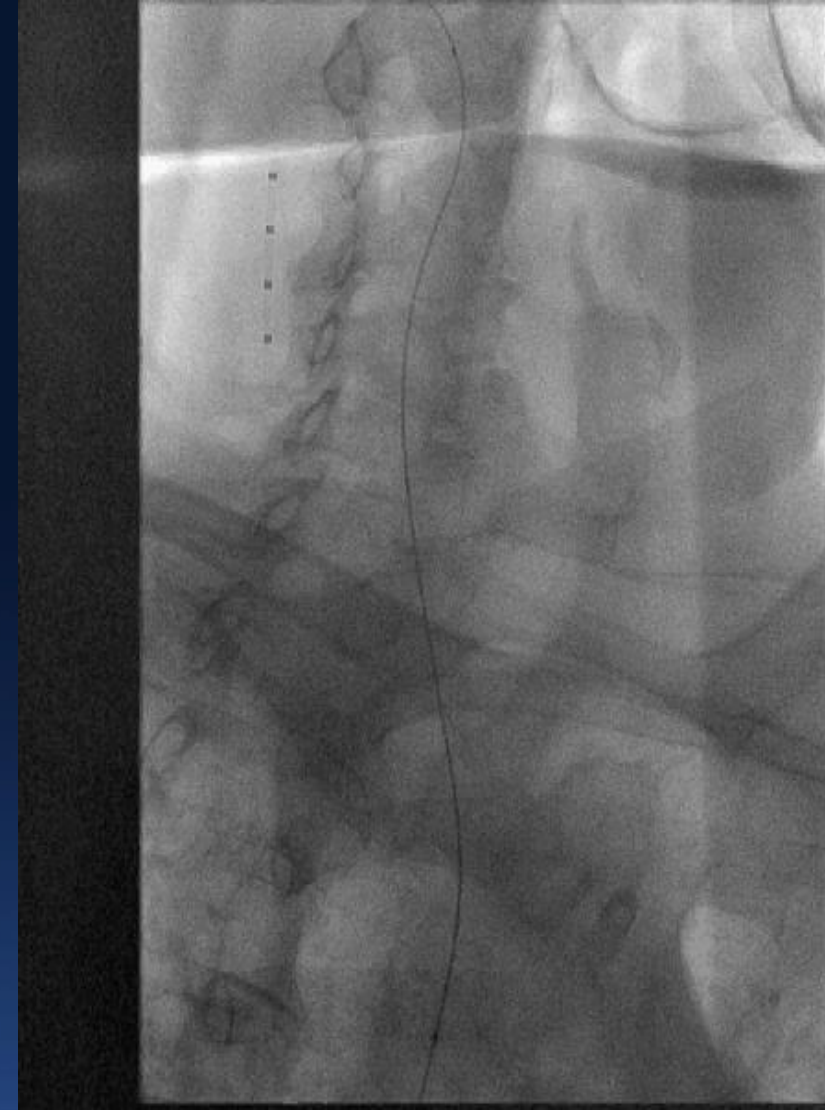
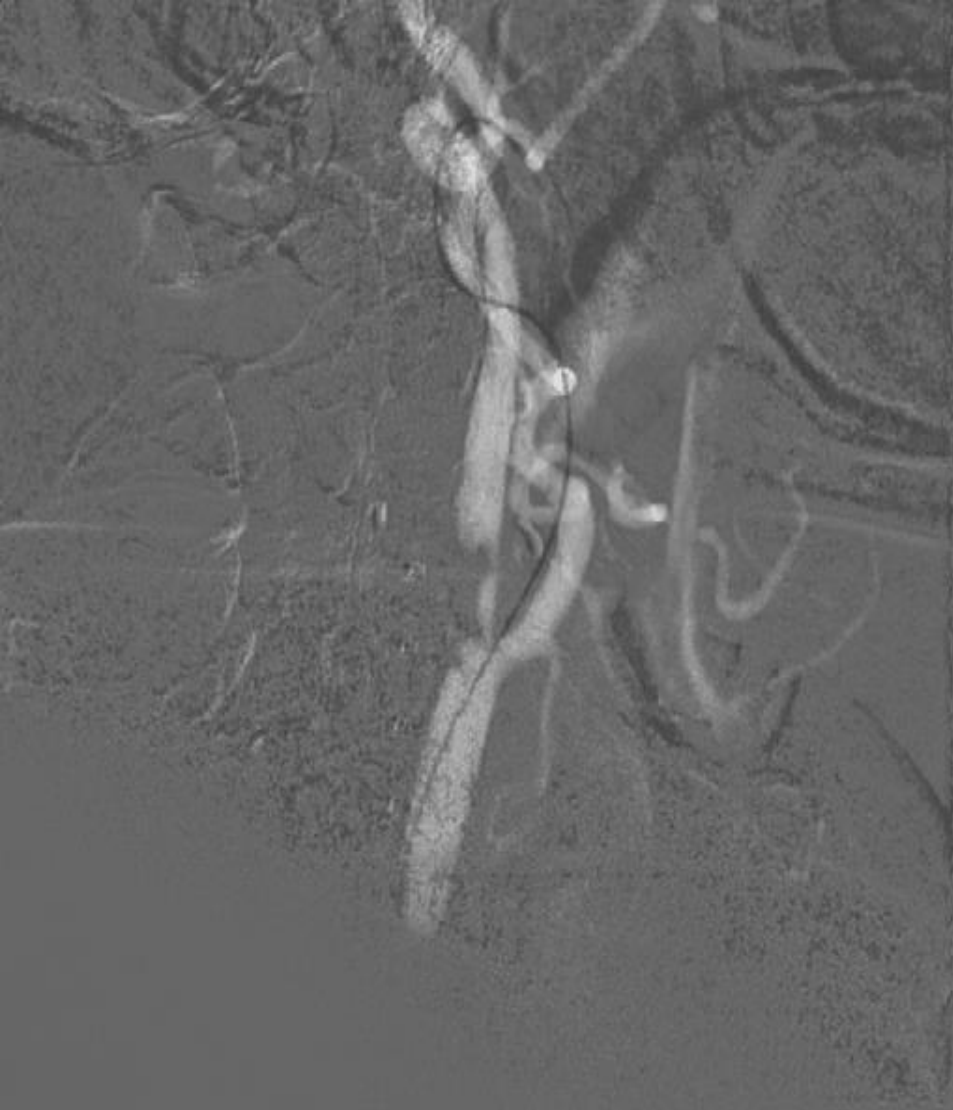
Sx Pt; Bad ICA landing zone; need guide stability: Proximal EPD



tct 25

 CARDIOVASCULAR
RESEARCH
FOUNDATION





XC GW to Support Wire in ECA

MoMa easily advanced..

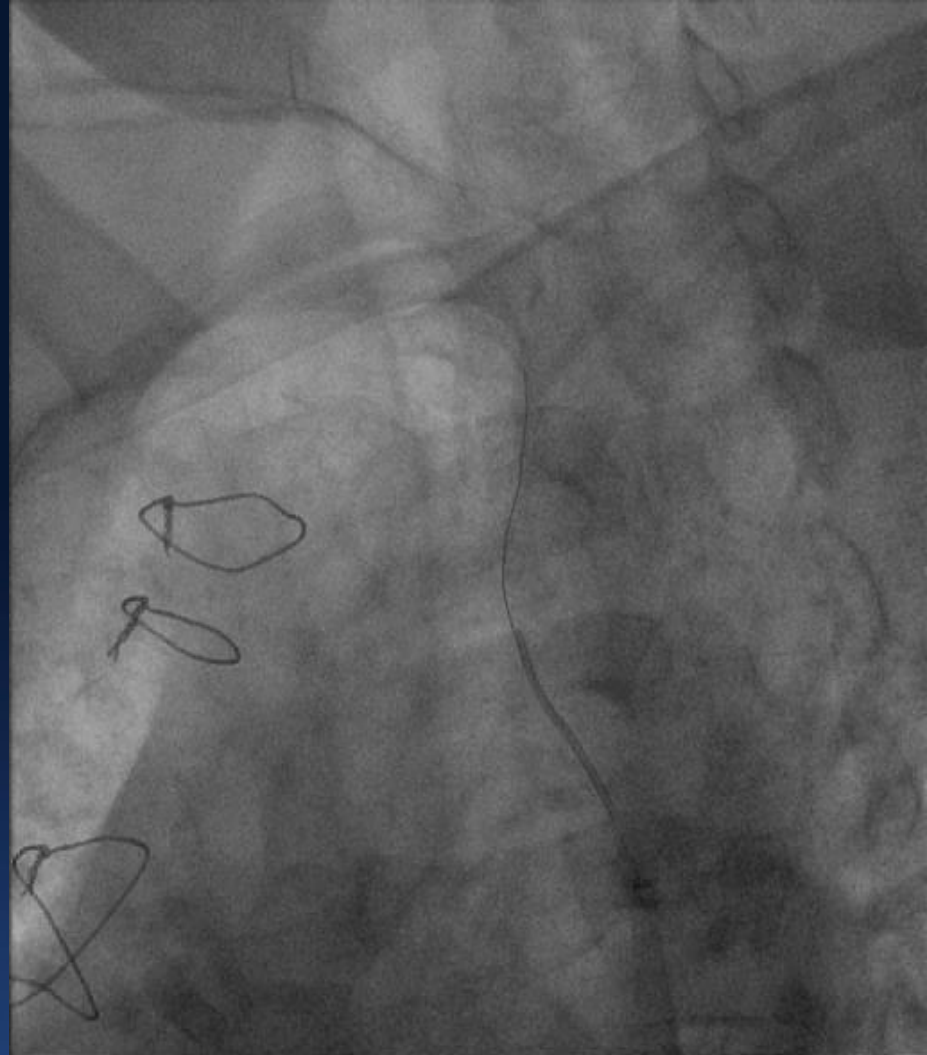
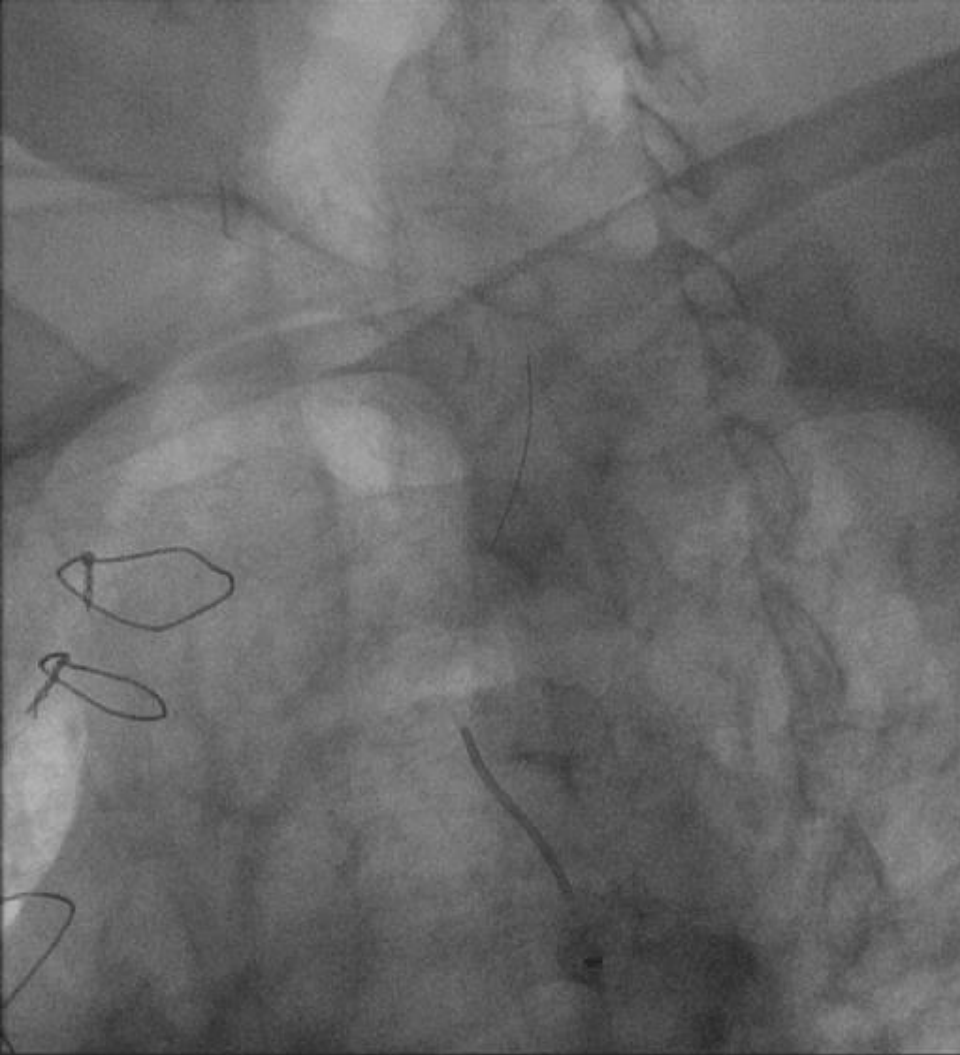


tct 25

 CARDIOVASCULAR
RESEARCH
FOUNDATION



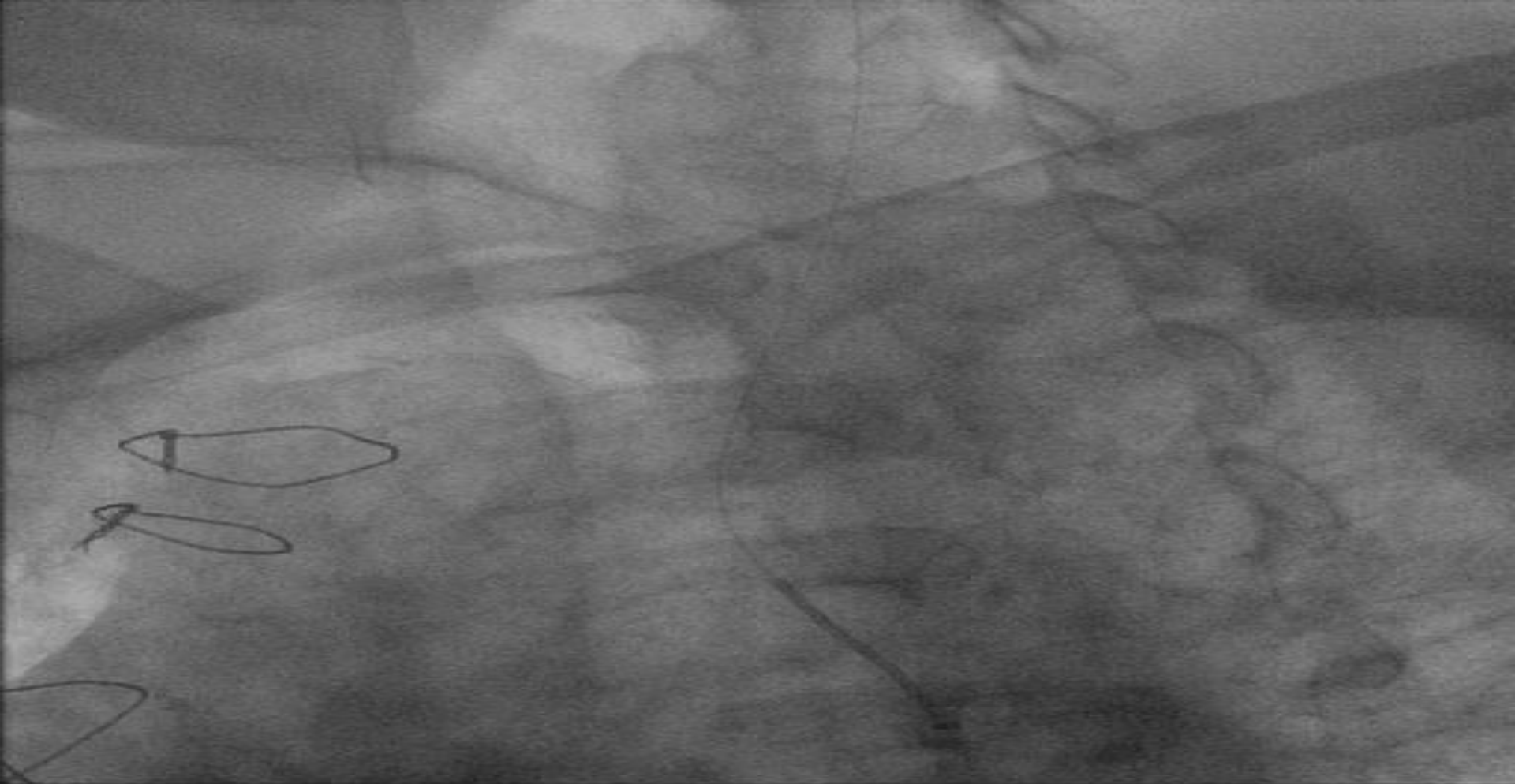
Ostial CCA AND ICA Disease



1st: XC length
Whisper 0.014 wire

“No Touch”

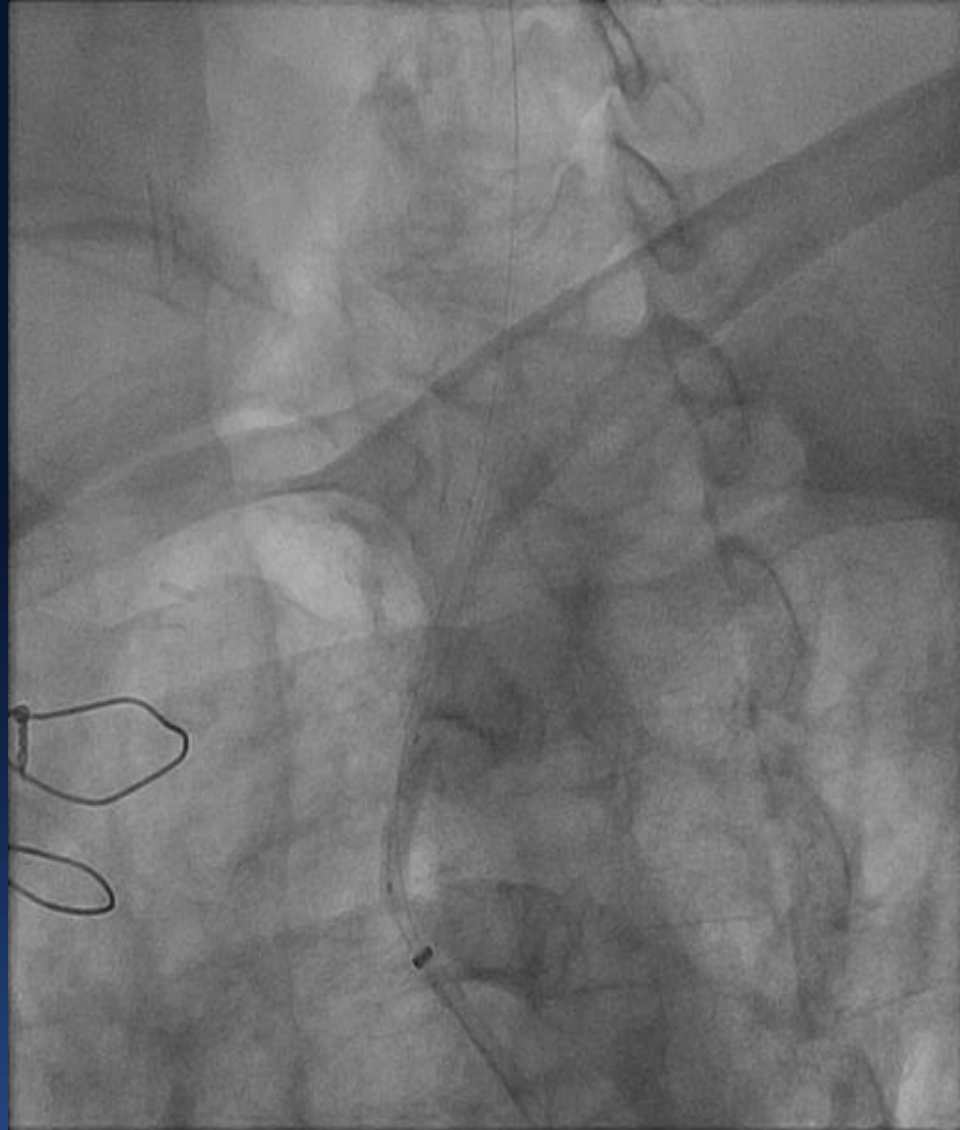
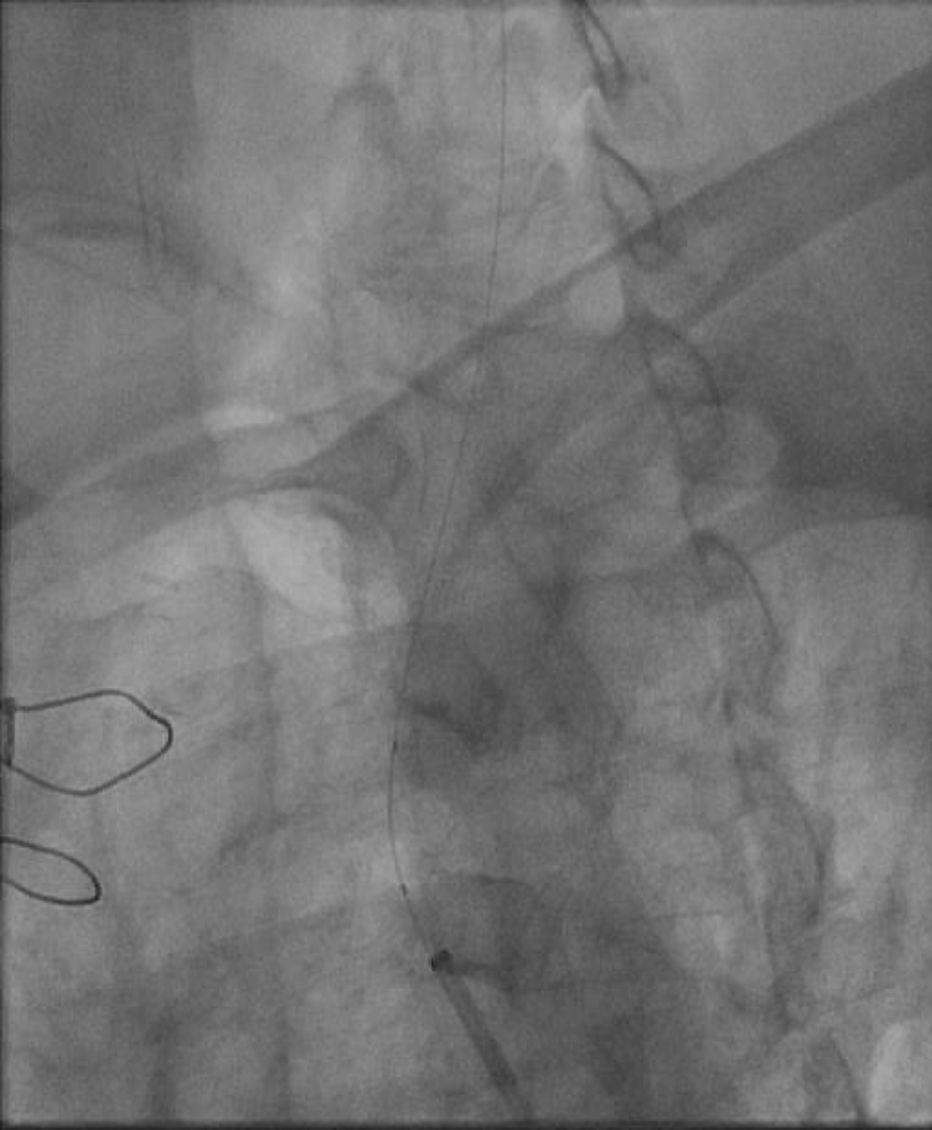
2nd: XC length
Nav 6 EPD wire

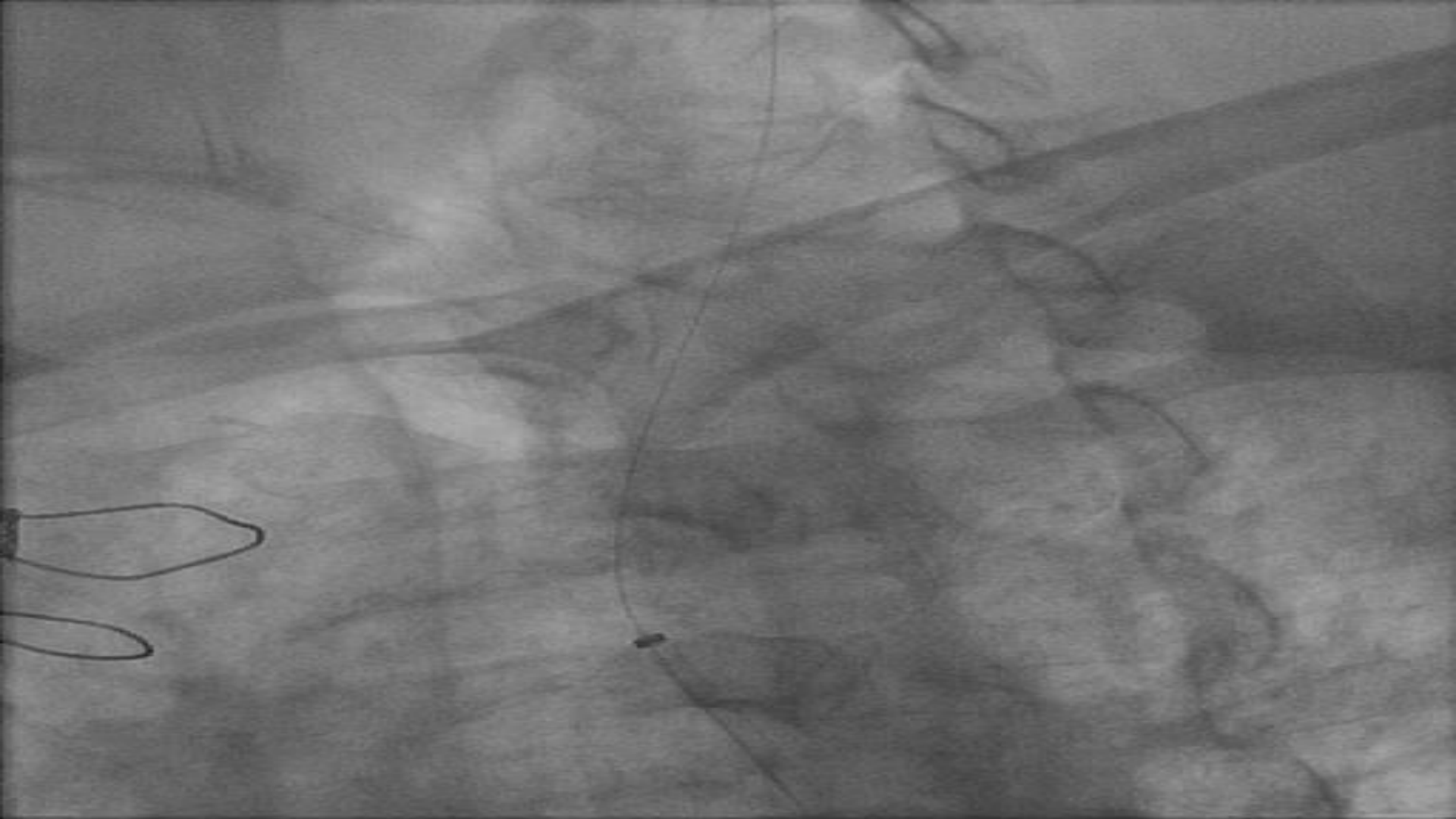


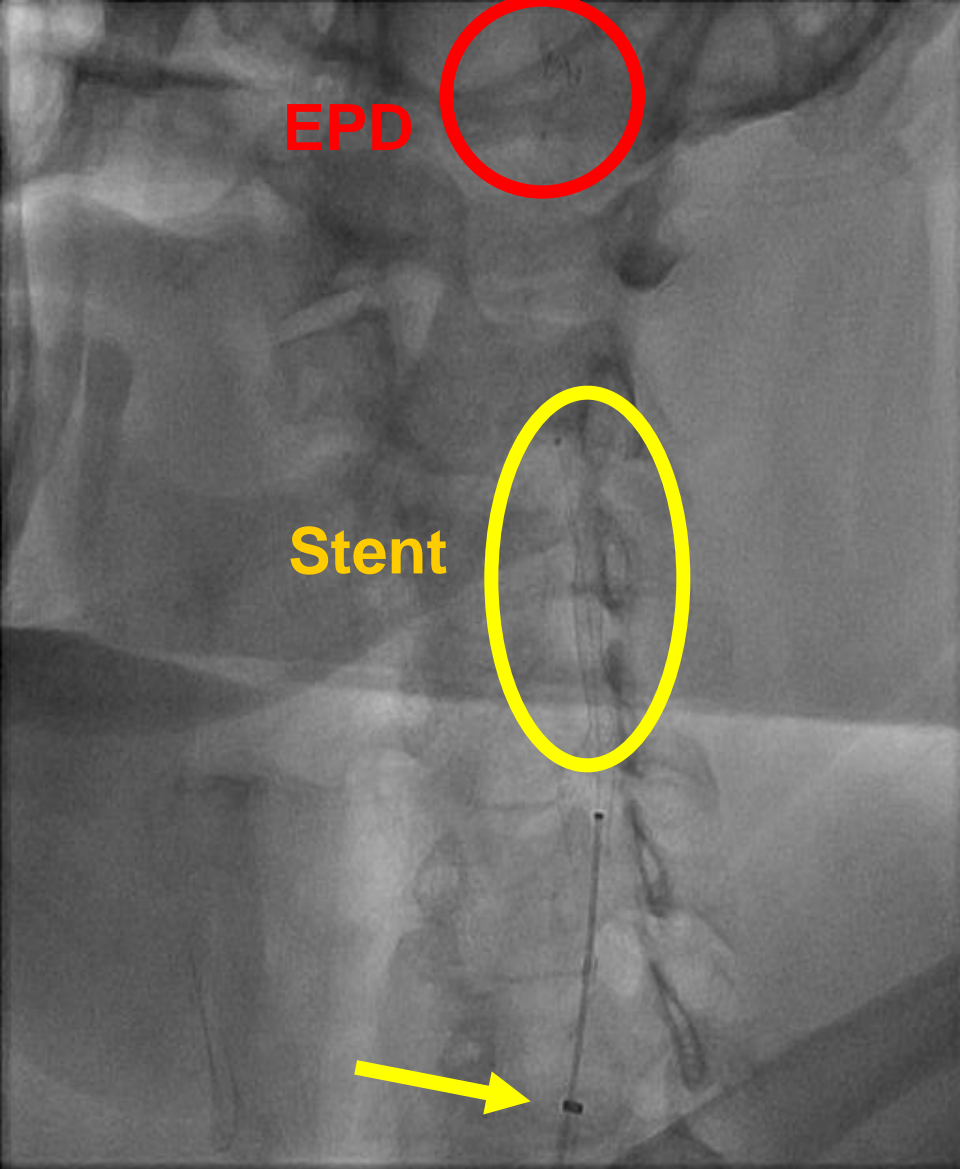
Getting Shuttle sheath close..

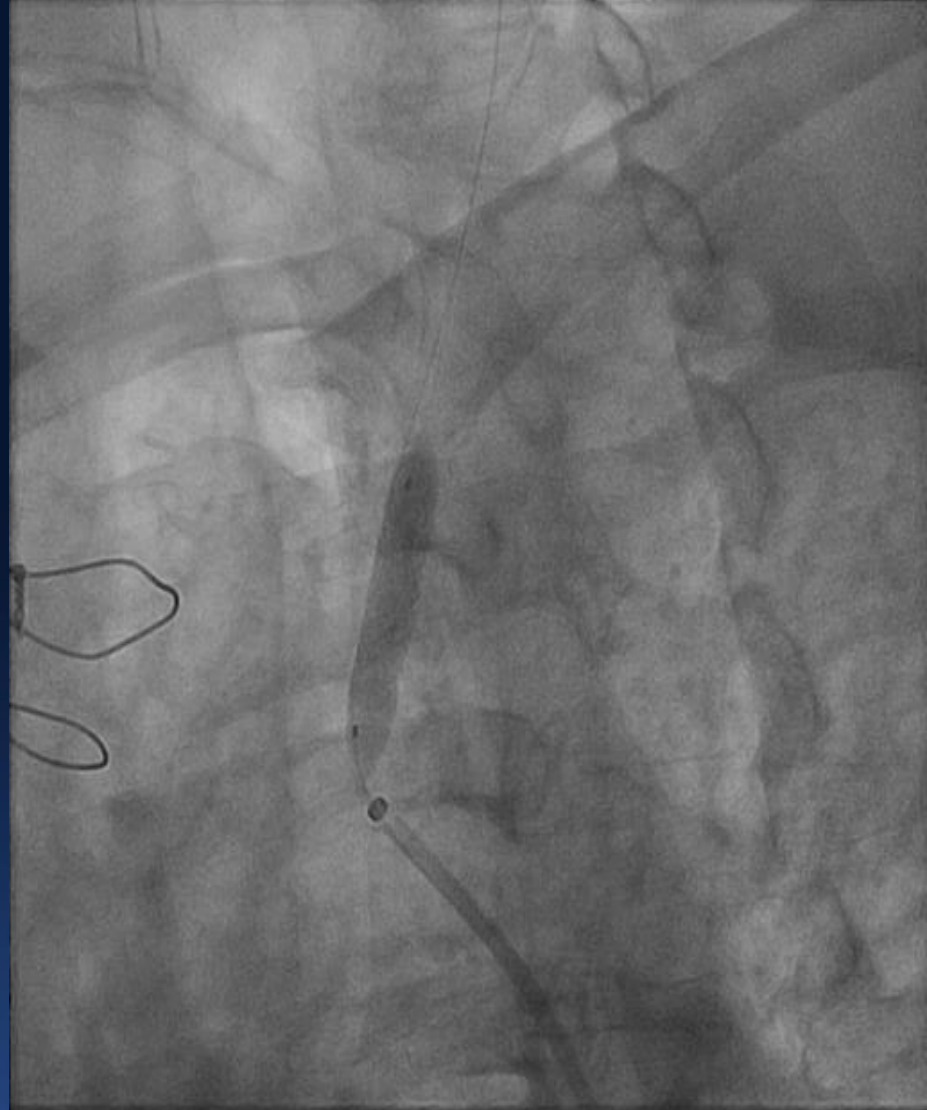
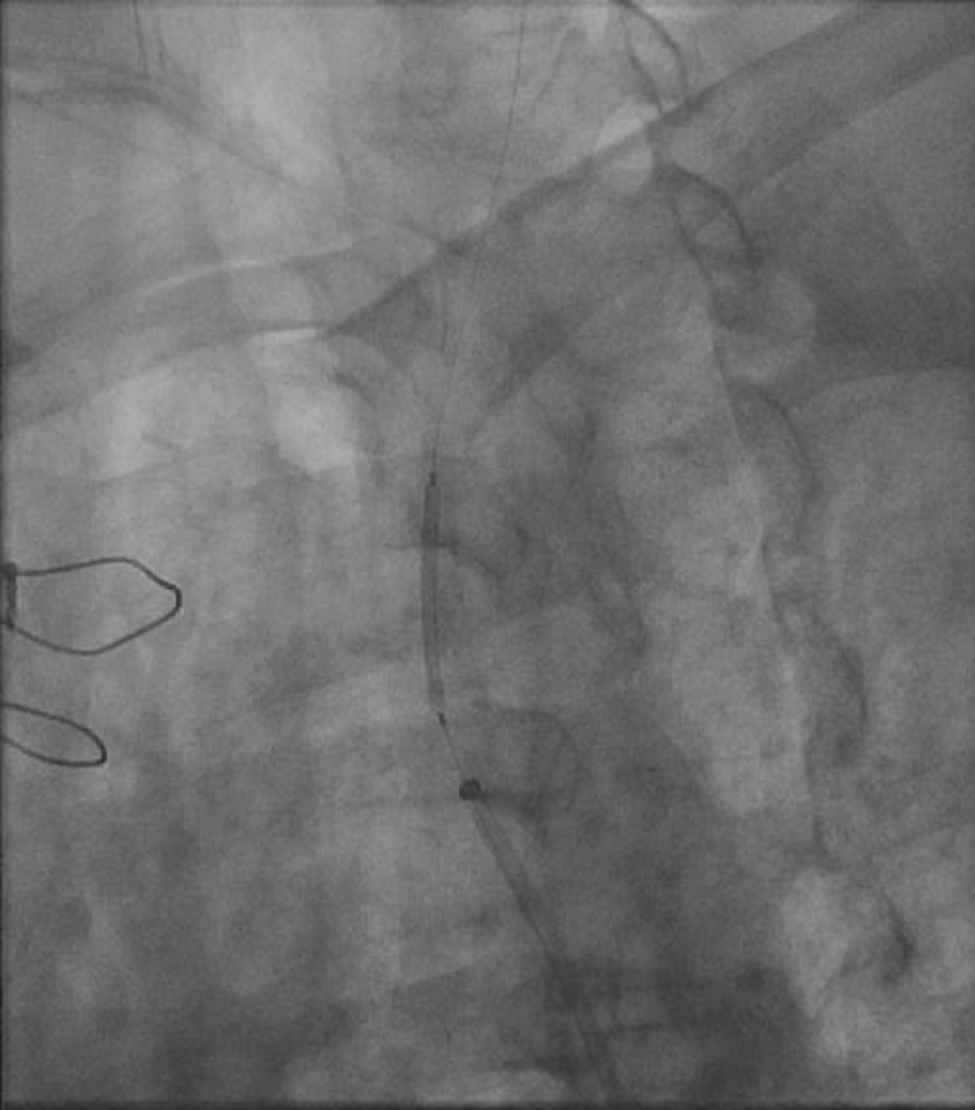


Advancing Nav 6 EPD over XC BARE wire









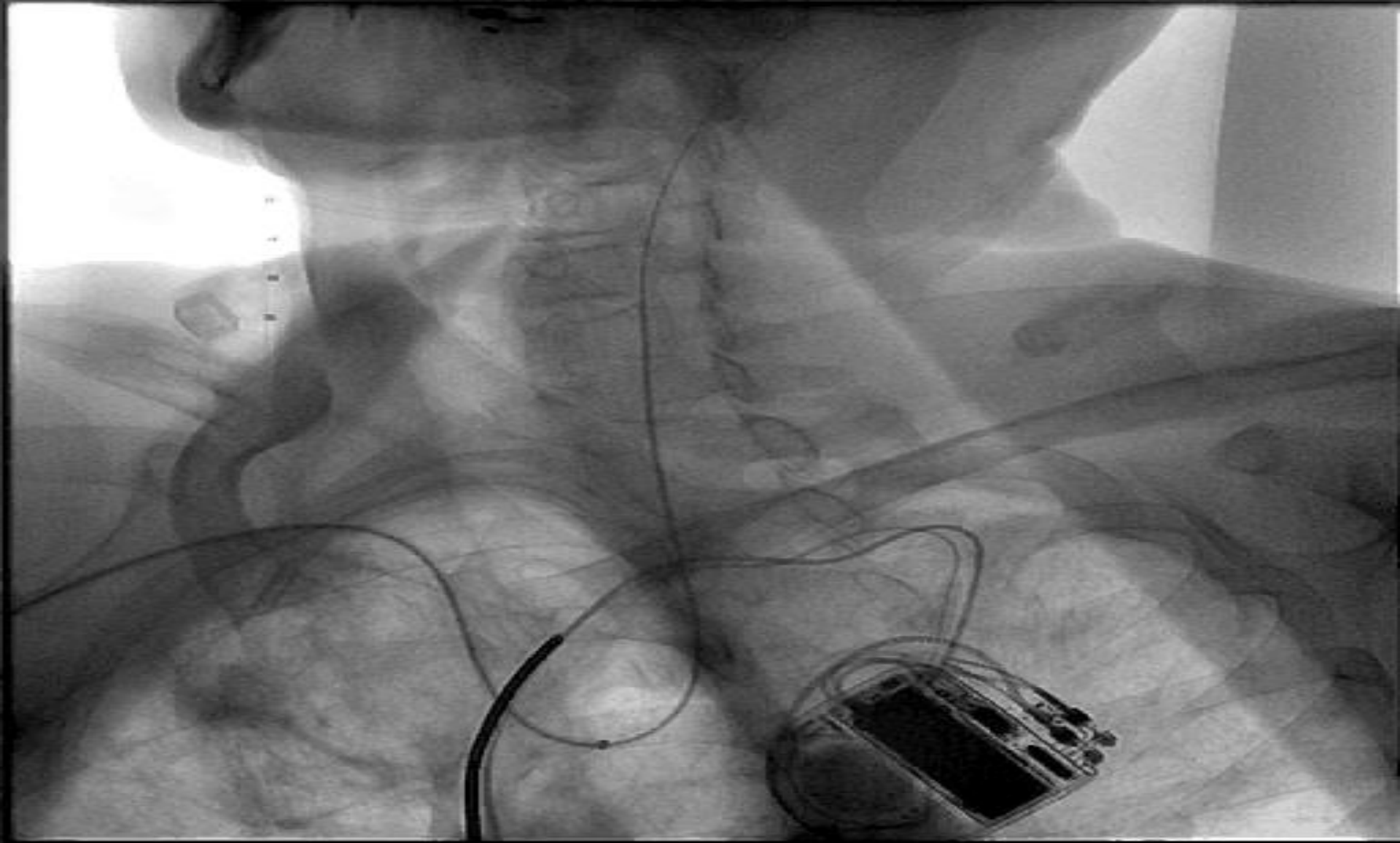
0.035 stent over BOTH XC length wires

No Femoral artery access? ECA is your friend





Shuttle sheath in EARLY; IM cath over GW into ECA



tct 25

 **CARDIOVASCULAR
RESEARCH
FOUNDATION**

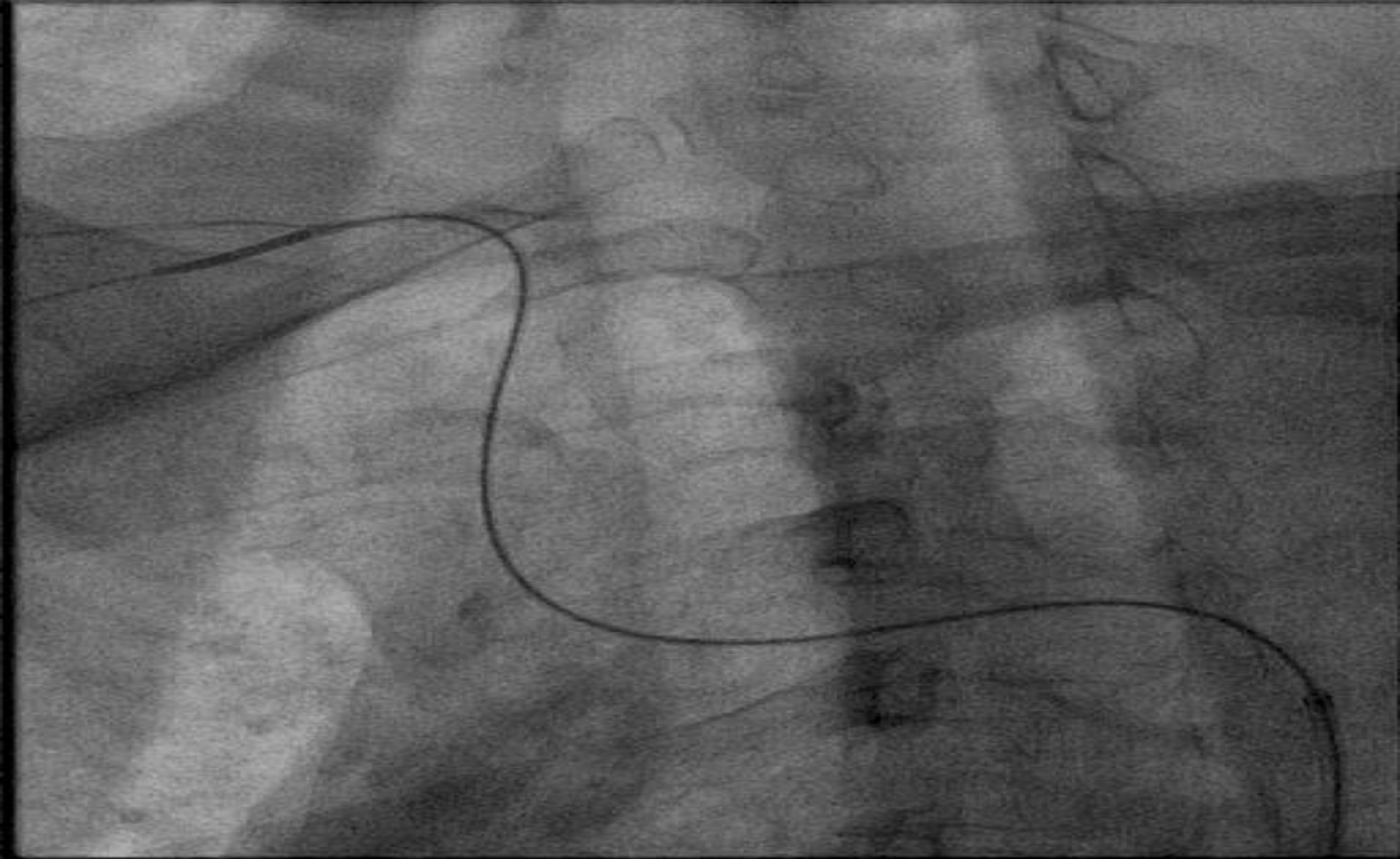


Guide- PRE

POST

Can't Get There? Be Creative





tct 25

 CARDIOVASCULAR
RESEARCH
FOUNDATION

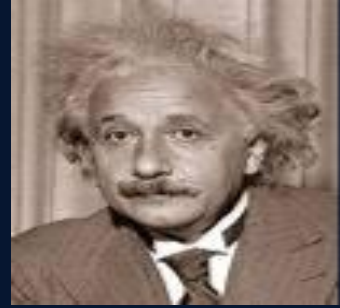




**GW and vert to CCA using
20 RAO, 20 Caudal Roadmap**

Guide carefully up..

CONCLUSIONS



- **FIRST consider risk/ benefit ratio of CAS in patients w difficult access, especially early in CAS experience**
- **Avoid diffuse Ca++ arch & CCA disease**
- **With favorable risk/benefit ratio, most CAS access issues can be overcome with a careful, modified approach**
- **“Direct carotid access” may prove helpful**

Thank You for Your Attention!

