UCDAVIS HEALTH SYSTEM

A HEALTHIER WORLD THROUGH BOLD INNOVATION

My Bright Practical Tips for Challenging AAA Anatomy

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Tip 1: Perform Ultrasound Guided Access for PEVAR

Ultrasound Guided PEVAR Technique

- Ultrasound guided access:
  - Ensure that stick is in CFA
  - Avoid areas of plaque/calcification
  - Optimal anterior wall puncture
- Micropuncture kit
- Double Proglide® technique
- Close over guidewire

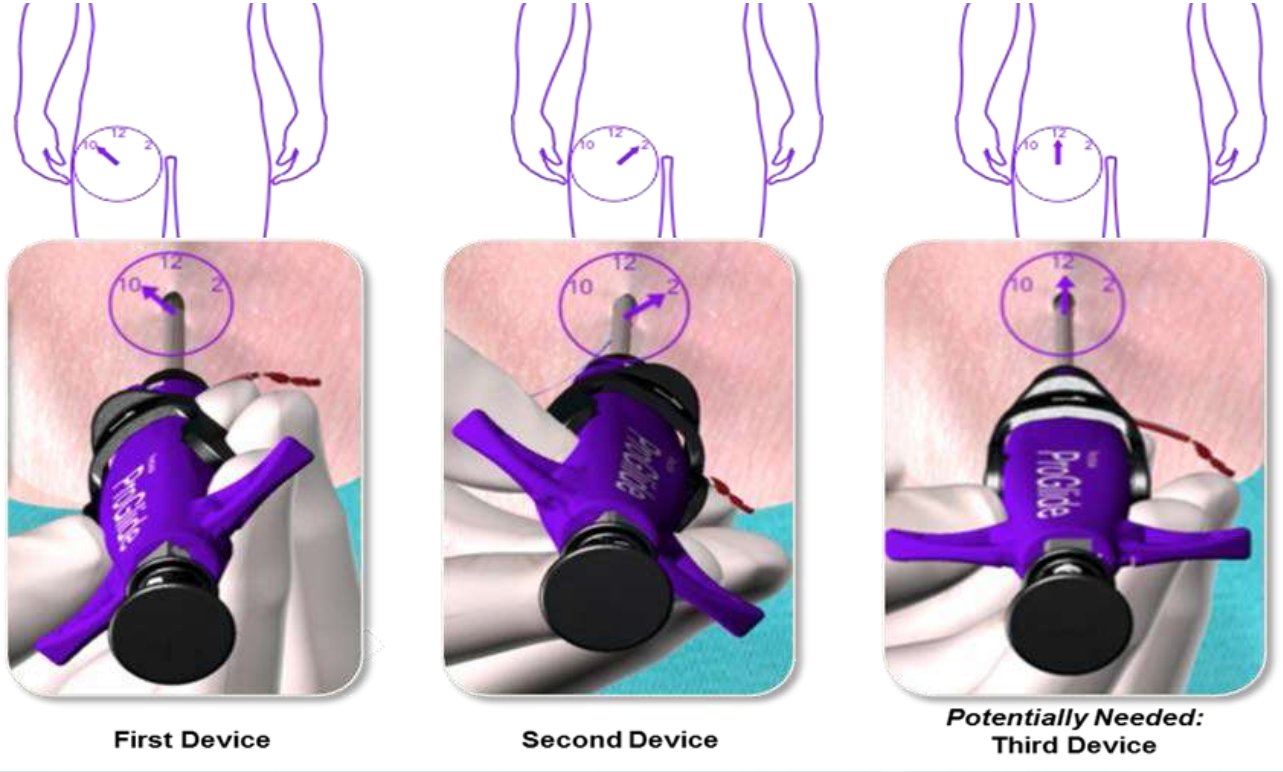

Gen MB
Vas
L38
CF
80%
13
99
MI
0.8
4.7
##bpm
Gen
0
Auto Gain
MB
Clips...
Page 2...

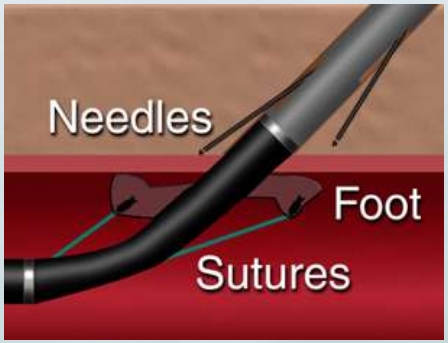
Choice of Closure Device for PEVAR

	Proglide	Prostar XL
Sutures*	Single monofilament suture Pre-tied knot Throws outside in	Two braided sutures, offset 90° Operator ties knot Throws inside out
Number of devices typically used per groin	2	1
Cost	$400-500 for 2 devices	$400-500 per device
Approval for up to	21 F	US: 10 F Europe: 24F
Profile	~8.6 F	~12F

*Monofilament suture may reduce the risk of infection vs. braided suture

Double Proglide® Technique





Who Should Have Percutaneous Closure?

Everyone who does not have…

- Anterior wall vessel calcification
- Significant occlusive PAD
- Femoral scar
- Femoral artery aneurysm
- Arterial conduit
- Significant obesity?

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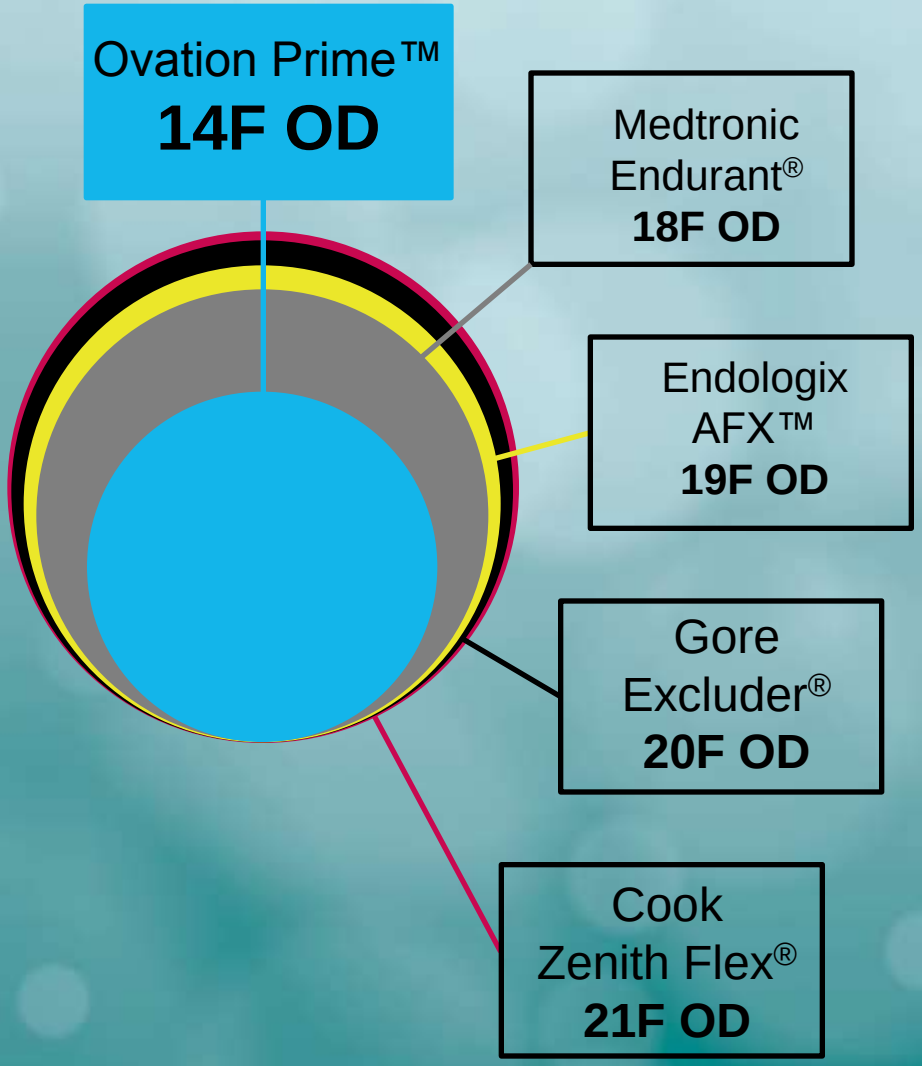
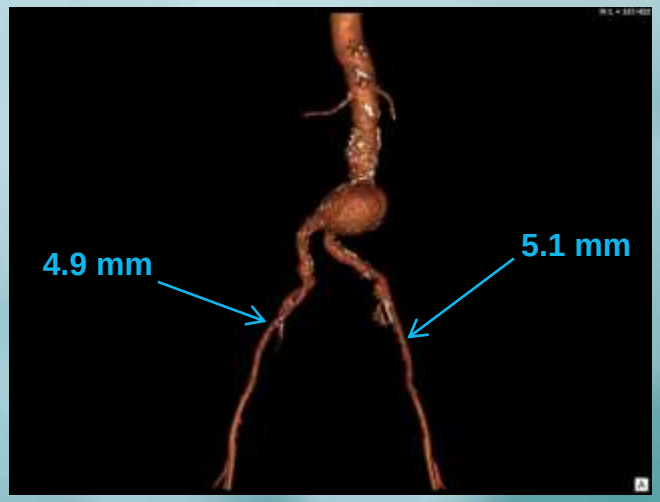
Tip 2: Proper Device Selection in Setting of Small Access Vessels

Stent Graft Profiles



Narrow Access



Tortuous Anatomy

Navigate Through Tight Access Vessels

Navigate Through Tight Access Vessels

TriVascular Ovation Prime Stent Graft

- Sheathless insertion
- 14 Fr outer diameter equivalent to outer diameter of 12 Fr sheath
- Device flexibility for delivery in tortuous anatomy
- Easy for Preclose technique

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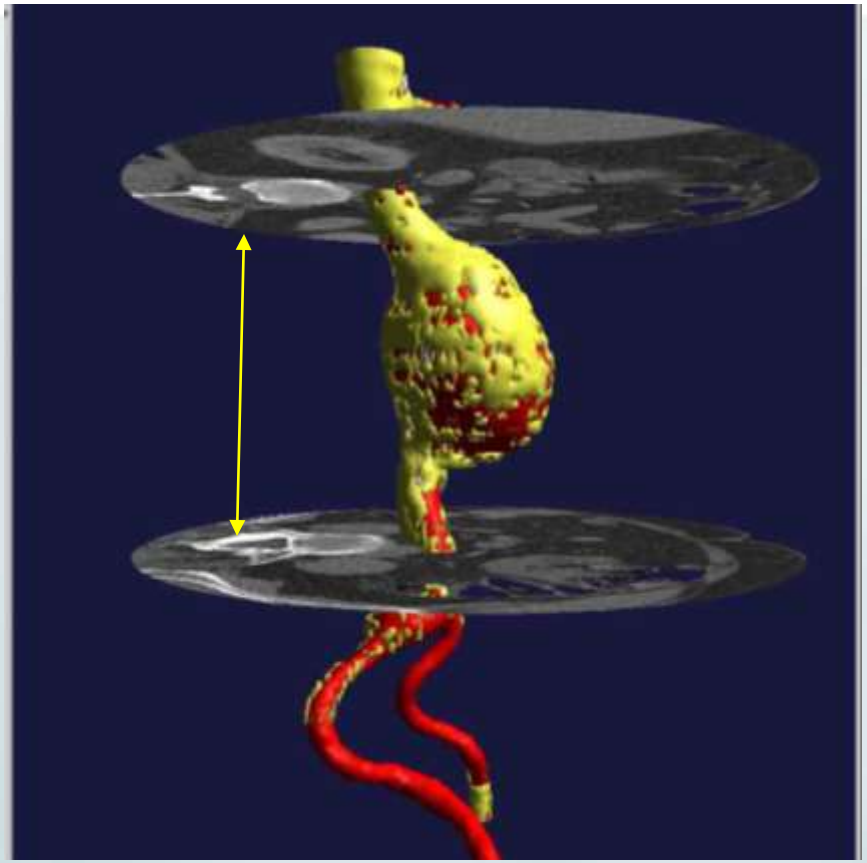
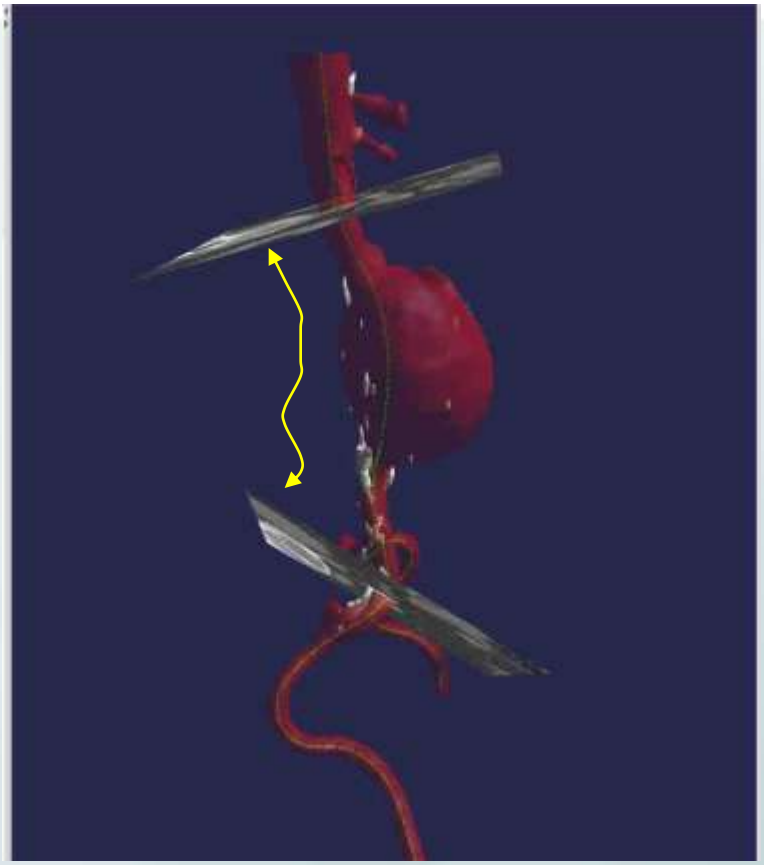
Tip 3: Careful Pre-Procedure Planning will Save Time and Reduce Complications

"Centerline" Measurements

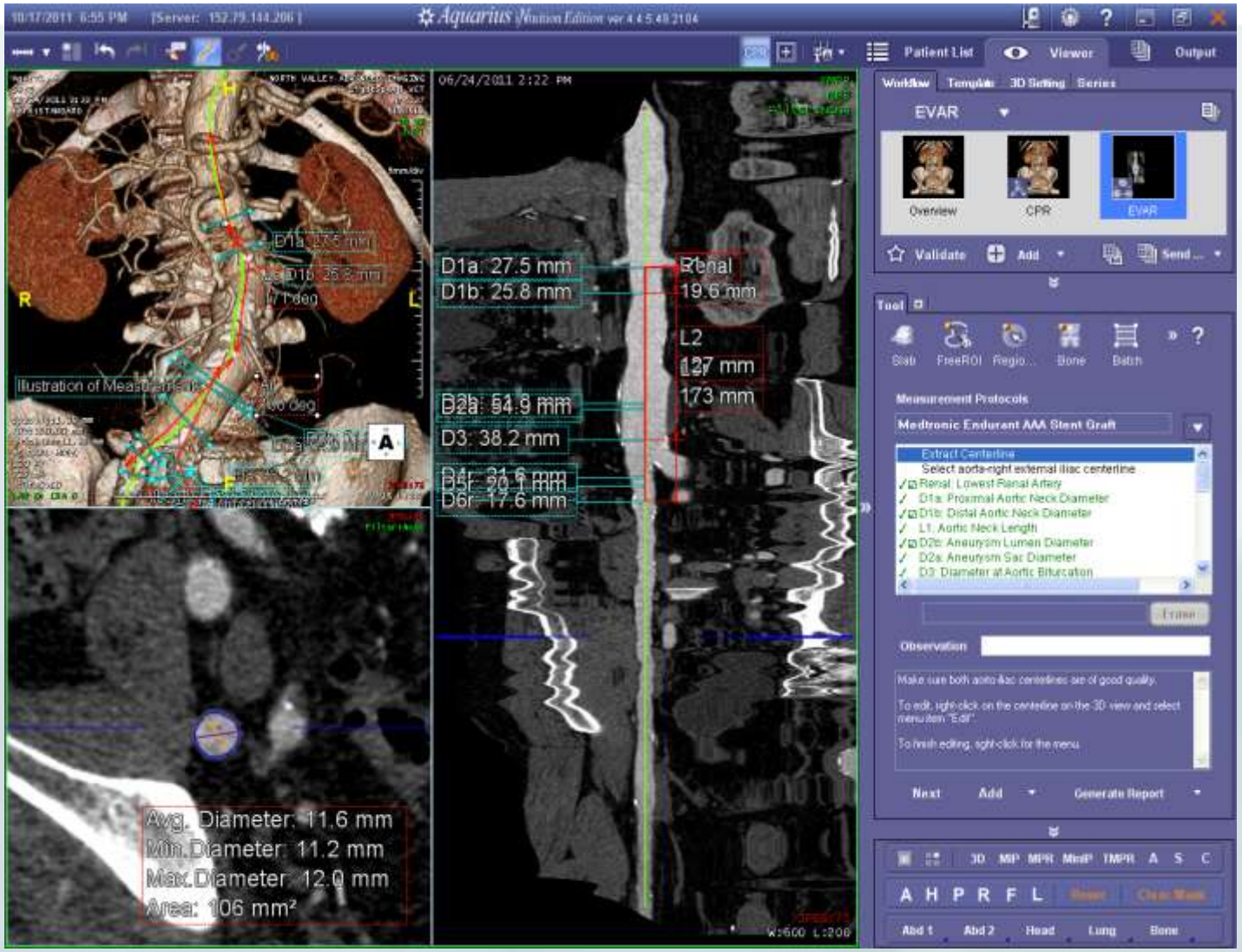


Standard length measurements from 2D axial slices do not account for vessel tortuosity



"Centerline" length measurements accurately define the vessel length

Endograft Procedure Planning



TeraRecon iNtuition

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Tip 4: Measure Again Just to be Sure


LAO 17°
CRAN 2°
FD 14.4 inch
0:00
1:67
10:56:47
9
1-6

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Tip 5: Pick the Right Device for Challenging Anatomy

Short Neck with Reverse Taper

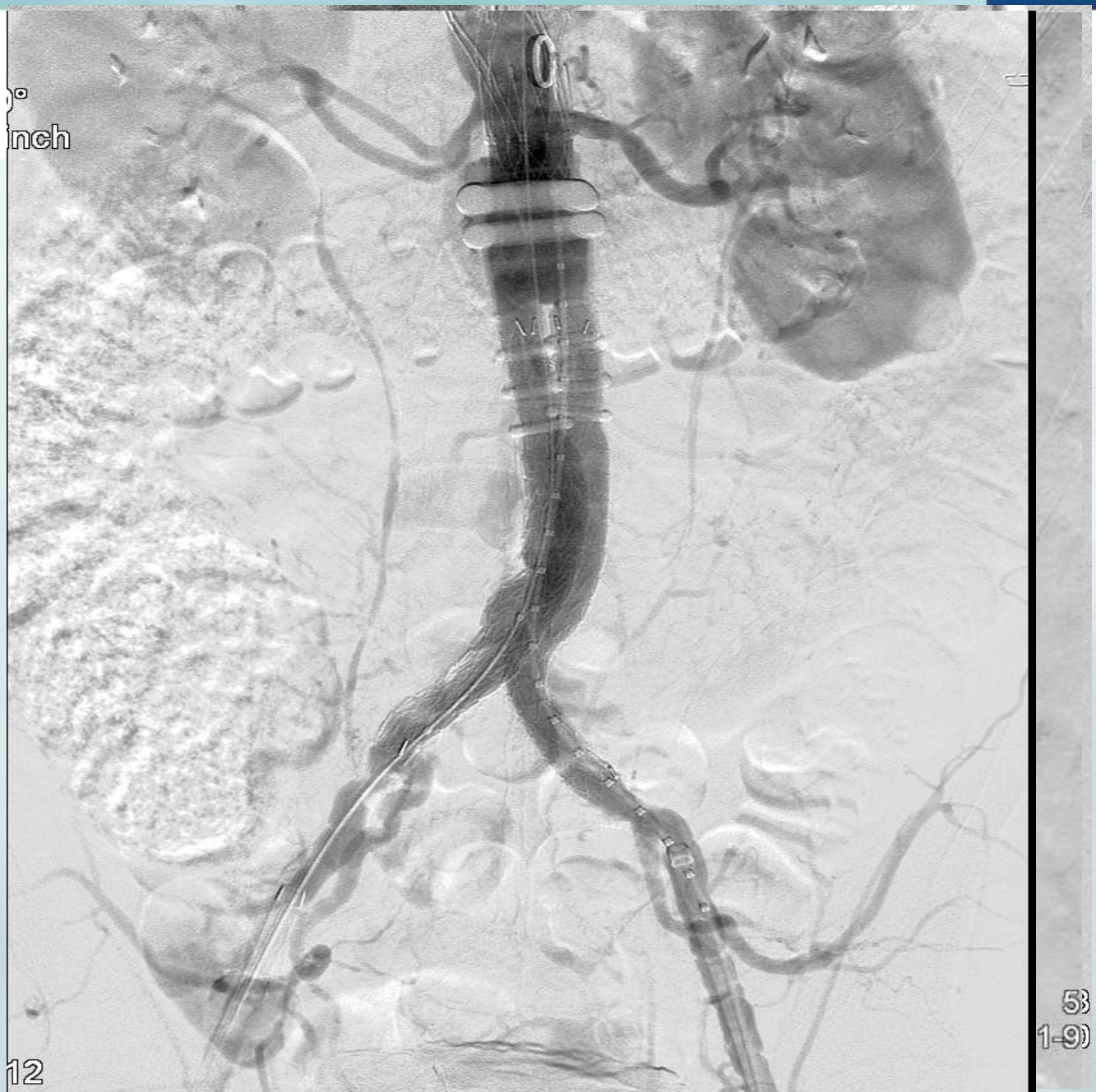
Ovation Prime Stent Graft

Suprarenal nitinol stent with integral anchors for fixation

Neck Indication: ≥ 7mm

Inflatable rings for optimal seal and conformability

Low-viscosity, radiopaque, fill polymer


inch
MRA
12
53
1-90


EXCLUDED AAA
P
0
5
10
X
st 5.27 cm
st 5.17 cm

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Tip 6: Have all of the necessary bail-out equipment available!

Bail Out Equipment

- Occlusion balloons
- Covered stents
- Coils and Amplatzer Occluder
- Large Palmaz stent
- IVUS

And a skillful vascular surgeon…..

Conclusions

- Percutaneous access and closure for most patients
- Careful pre procedure planning
- Enlightened device selection for challenging anatomy
- Expect the best but prepare for the worst

PEVAR at TCT AP