ELDERLY LADY WITH SIGNIFICANT BILATERAL CAROTID ARTERY STENOSIS AND BOVINE ARCH!!

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Disclosure

We do not have any potential conflict of interest

85 Year old lady

- DM
- HT
- CAD Post PTCA (2006)
- Recurrent TIAs

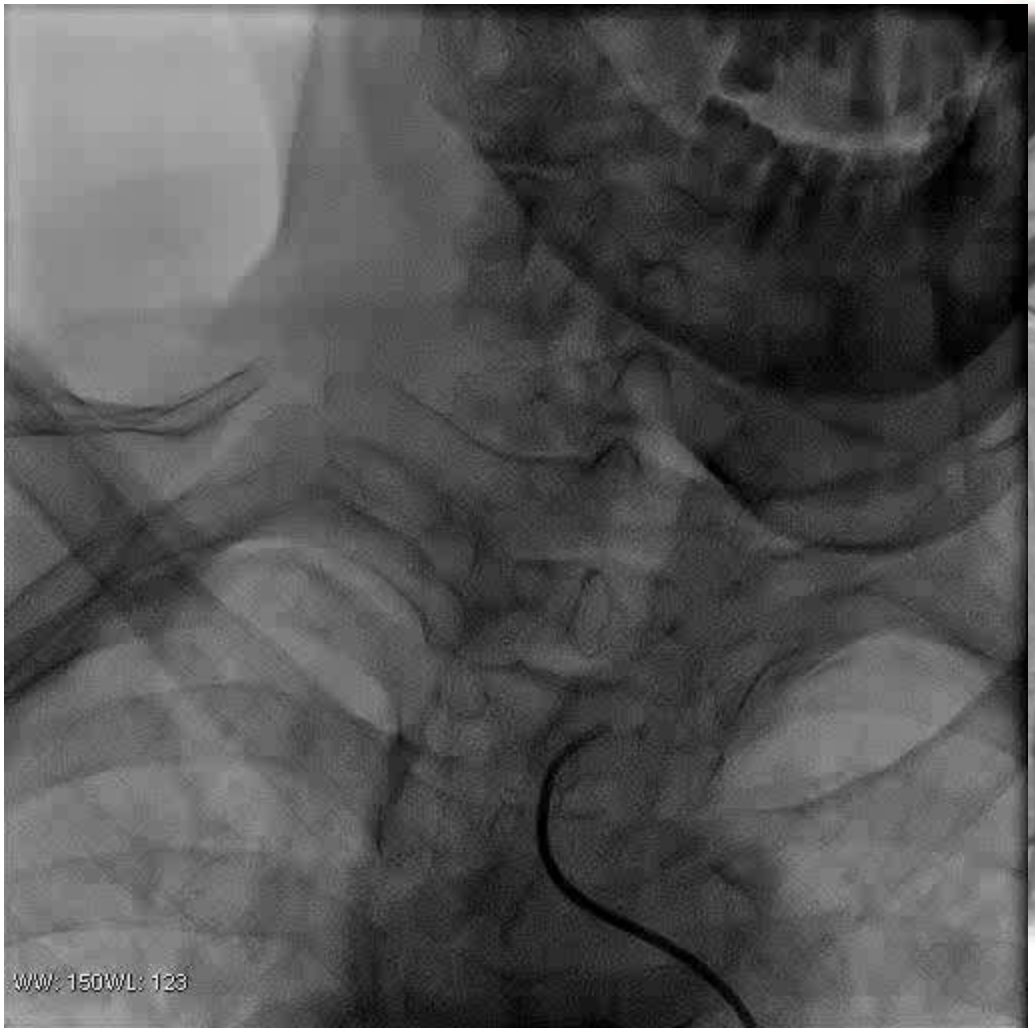
CAROTID ANGIOGRAM

LICA 95-99%, Lt ECA100%

RICA Subtotal Occlusion, Rt ECA 20-30%

Anatomy: Technical Issues
Can This Case Be Done and How

- Vascular access choice
- Diagnostic Catheter Choice
- Sheath vs Guide Catheter
- Choice of Neuro Protection
- Stent selection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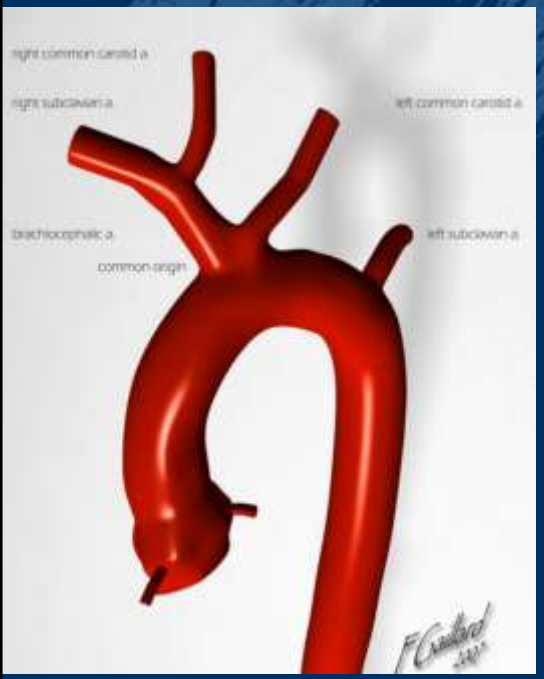
BOVINE ARCH


right common carotid a.
right subclavian a.
left common carotid a.
brachiocephalic a.
left subclavian a.
common origin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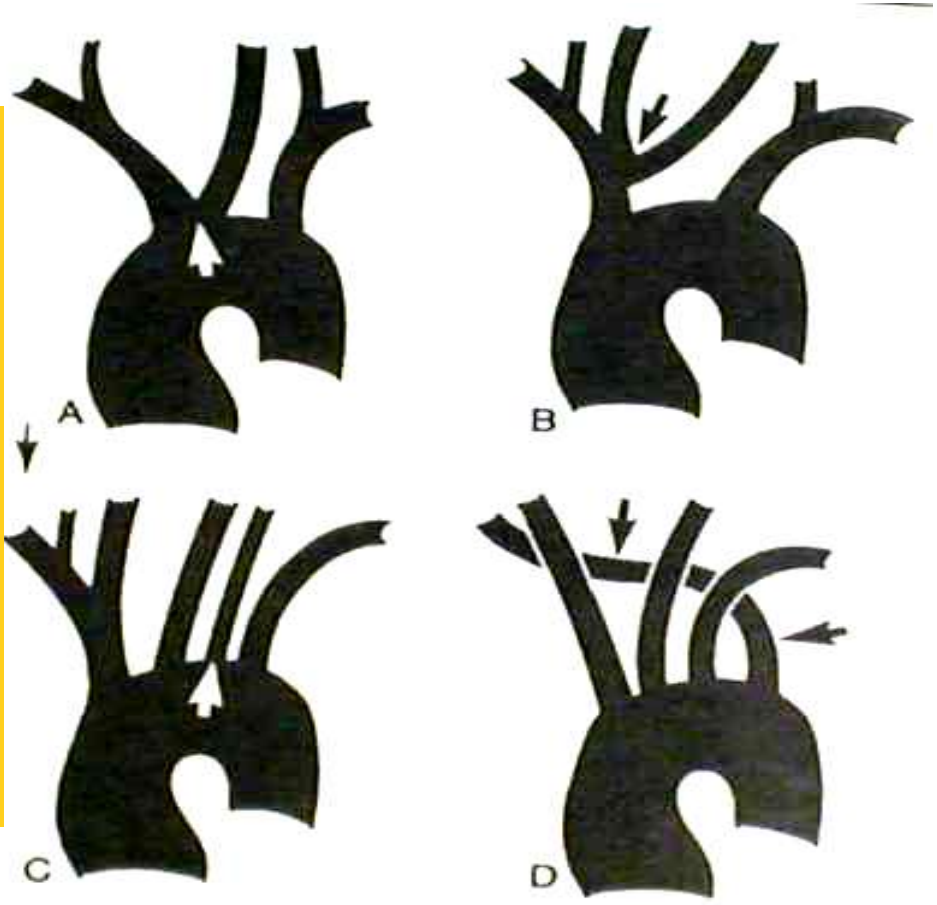
Arch Anatomy

A. Common Origin

B. Bovine Anatomy

C. Vertebral Origin

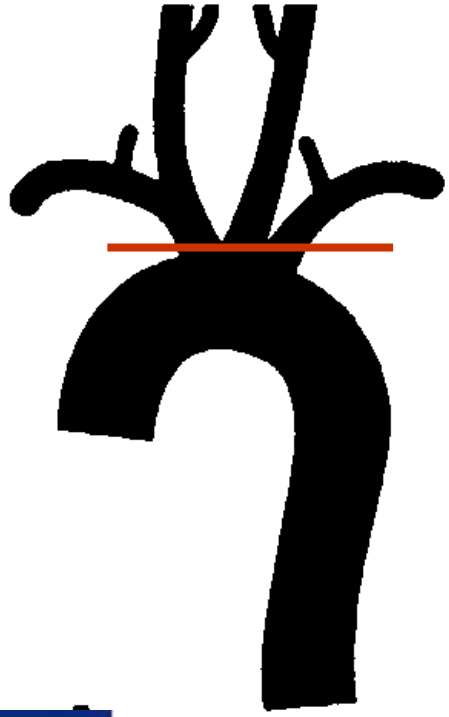
D. Right Subclavian Origin

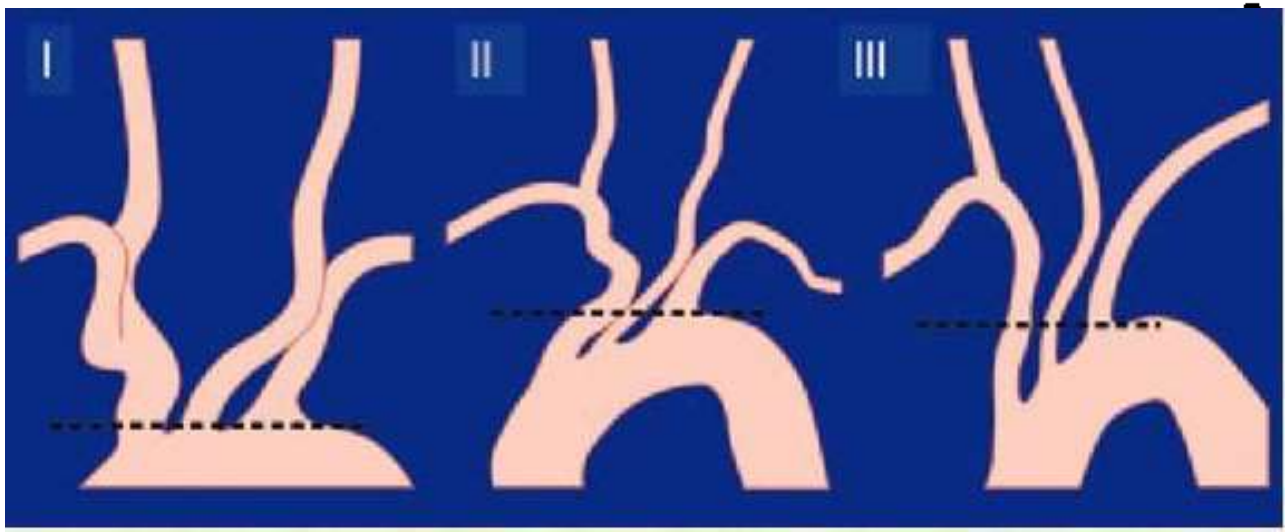


Arch Anatomy

Using the origin of the left subclavian artery as a landmark, the arch curvature can be classified into three levels.

- **Type I** Least Difficult: all at same level
- **Type II** More Difficult: all <2 CCA dia
- **Type III** Most Difficult: all lower >2 CCA





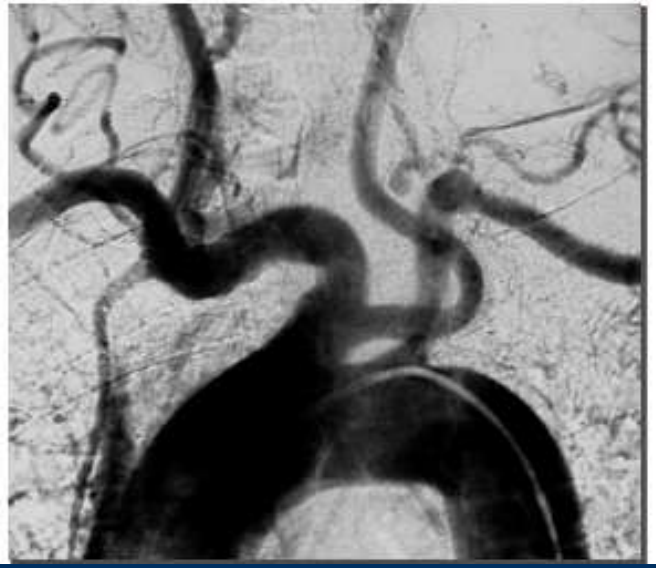
Carotid Access

The most difficult part of the procedure

Arch & access to CCA related complications

CAPTURE registry: 20% of neurologic events were contralateral.

That means that at least 40% of events are arch or acess related.

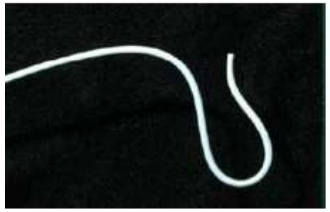


CCA engagement

Types of Aortic Arch

I	II	III
JR Berenstein AR mod.	Simmons AR mod. Hockey-stick IM	Simmons Hockey-stick IM
Long sheath Guiding cath.	Long sheath Guiding cath.	Guiding cath.

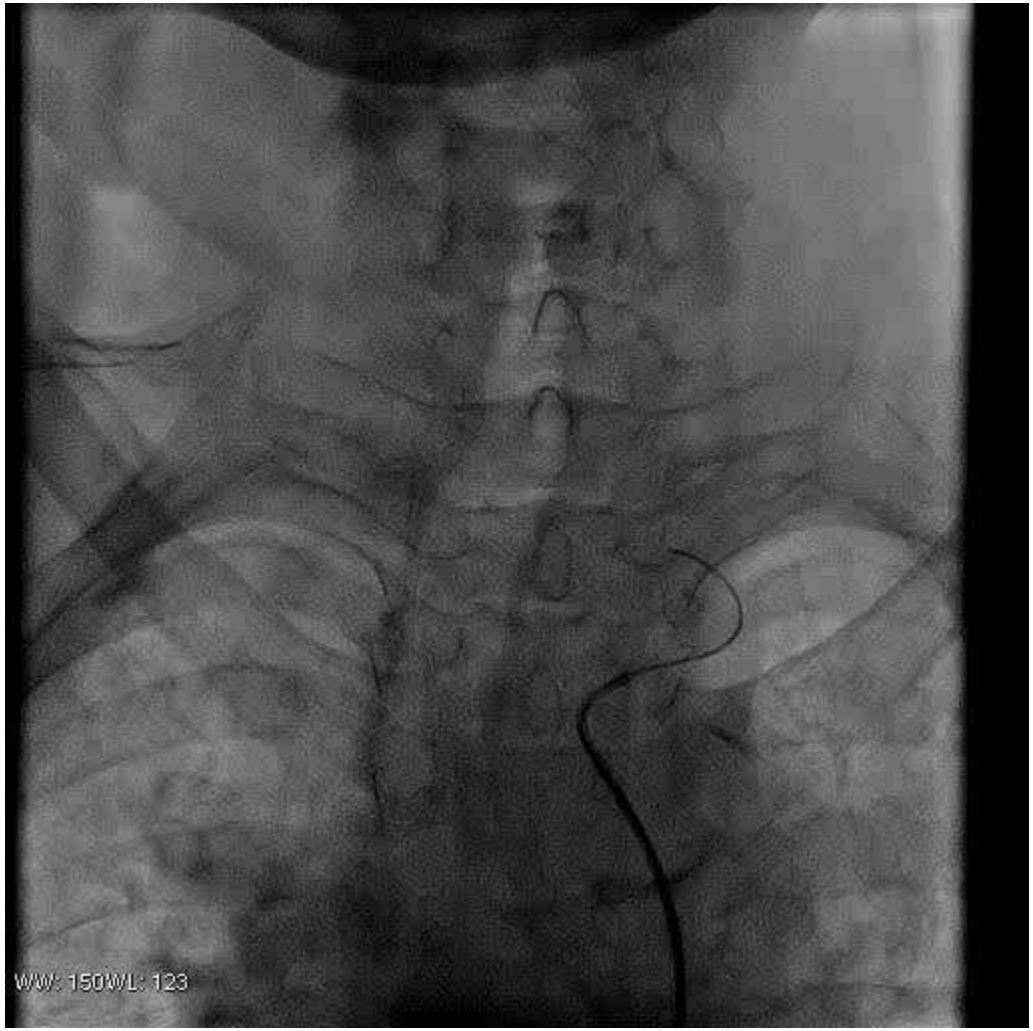
DIAGNOSTIC CATHETERS FOR DIFFICULT ARCHES



Vitek

Amplatz

Simmons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ALTERNATE ACCESS STRATEGIES FOR COMPLEX ANATOMY

- ALTERNATE ACCESS– RADIAL/CAROTID
- BUDDY WIRE
- SPECIAL GUIDING CATHETER

1 Wire the Aortic Arch

Introduce a standard and stiff 0.035" guidewire into the aortic arch.

Backload Guidewires into the Piton™ GC

Insert stiff guidewire into "side hole" and standard wire into "front hole" of the Piton.

2 Position Piton under Supraaortic Vessels

Introduce and advance system until side hole of Piton is in front of ostium of vessel to be treated.

3 Reshape the Tip

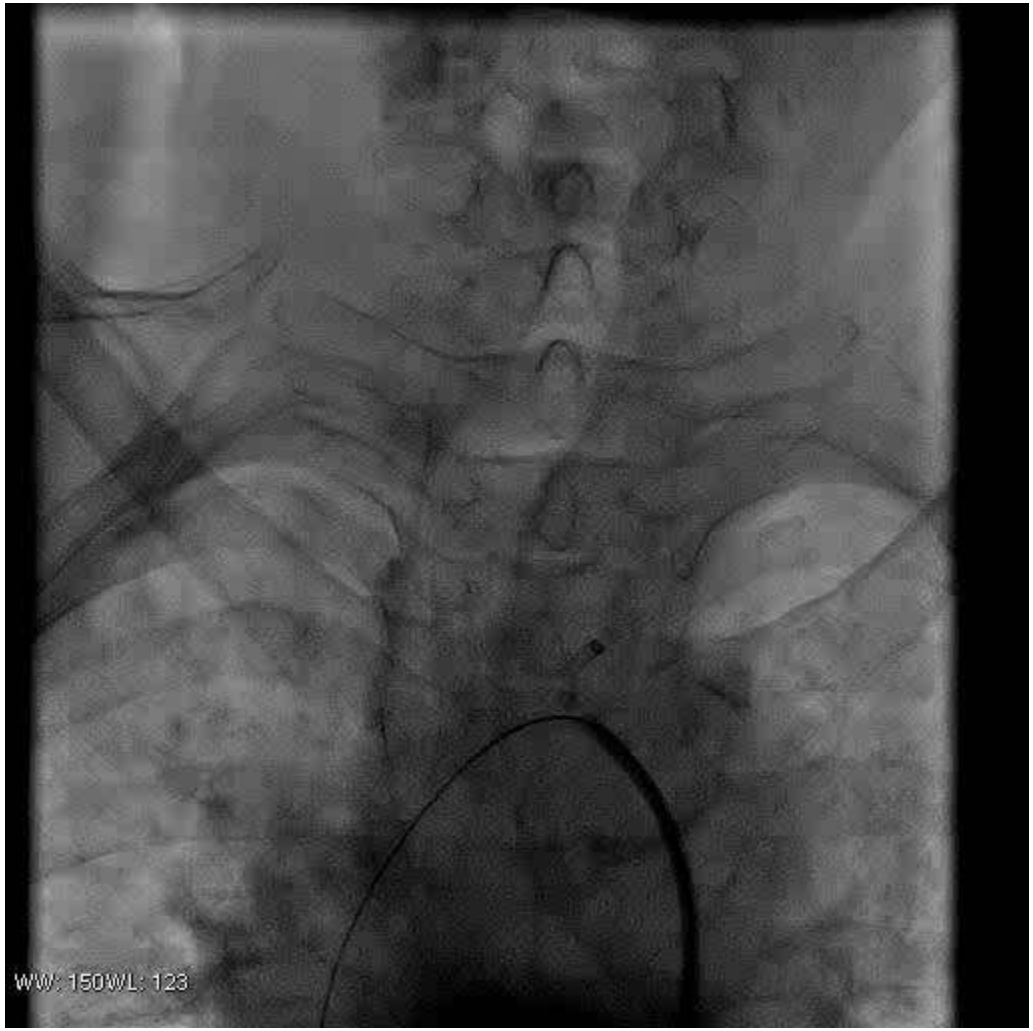
Partially pull back standard wire to atraumatically reshape tip.

4 Engage CCA Ostium

Rotate Piton to engage tip into ostium of vessel. Carefully re-advance standard wire into the carotid vessel.

5 Cannulate CCA

Retract the stiff guidewire off the side hole and re-advance it to same level as standard wire. Pull out standard wire and start planned intervention.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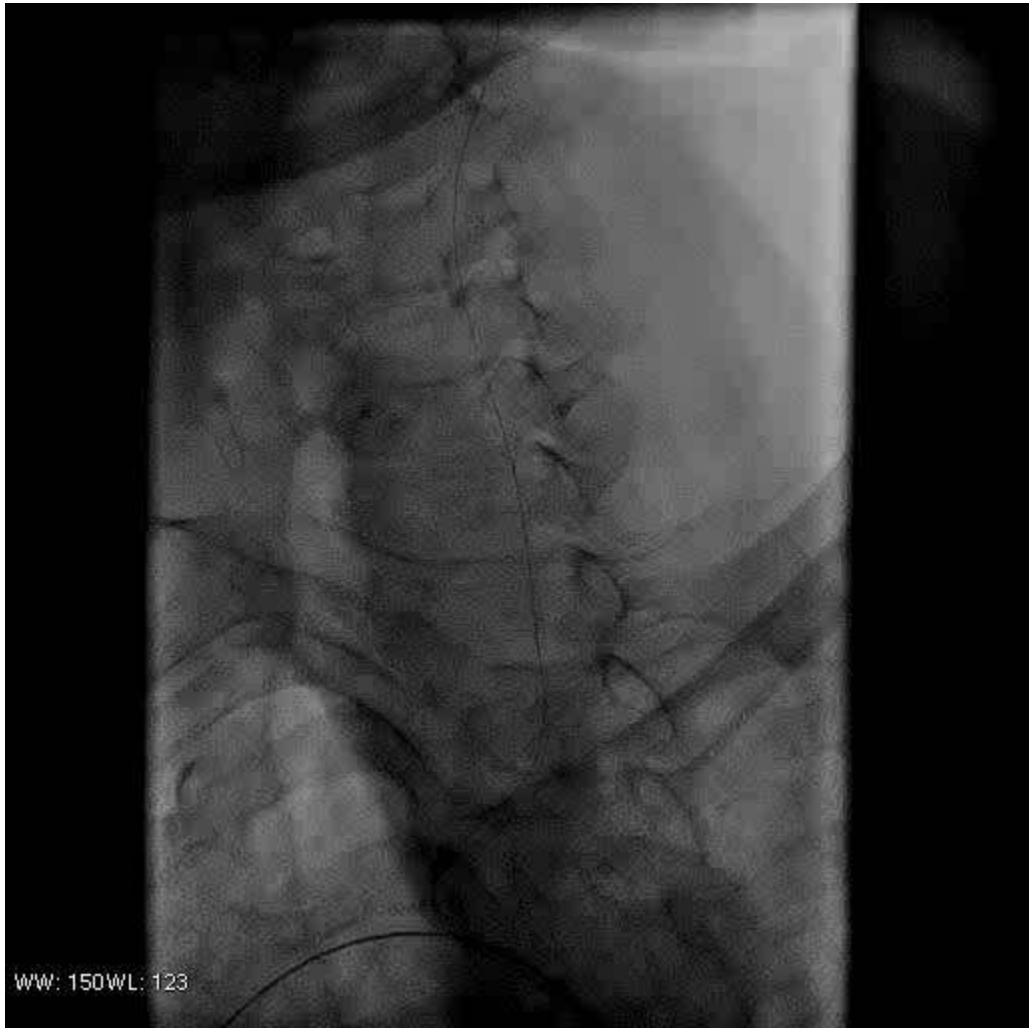
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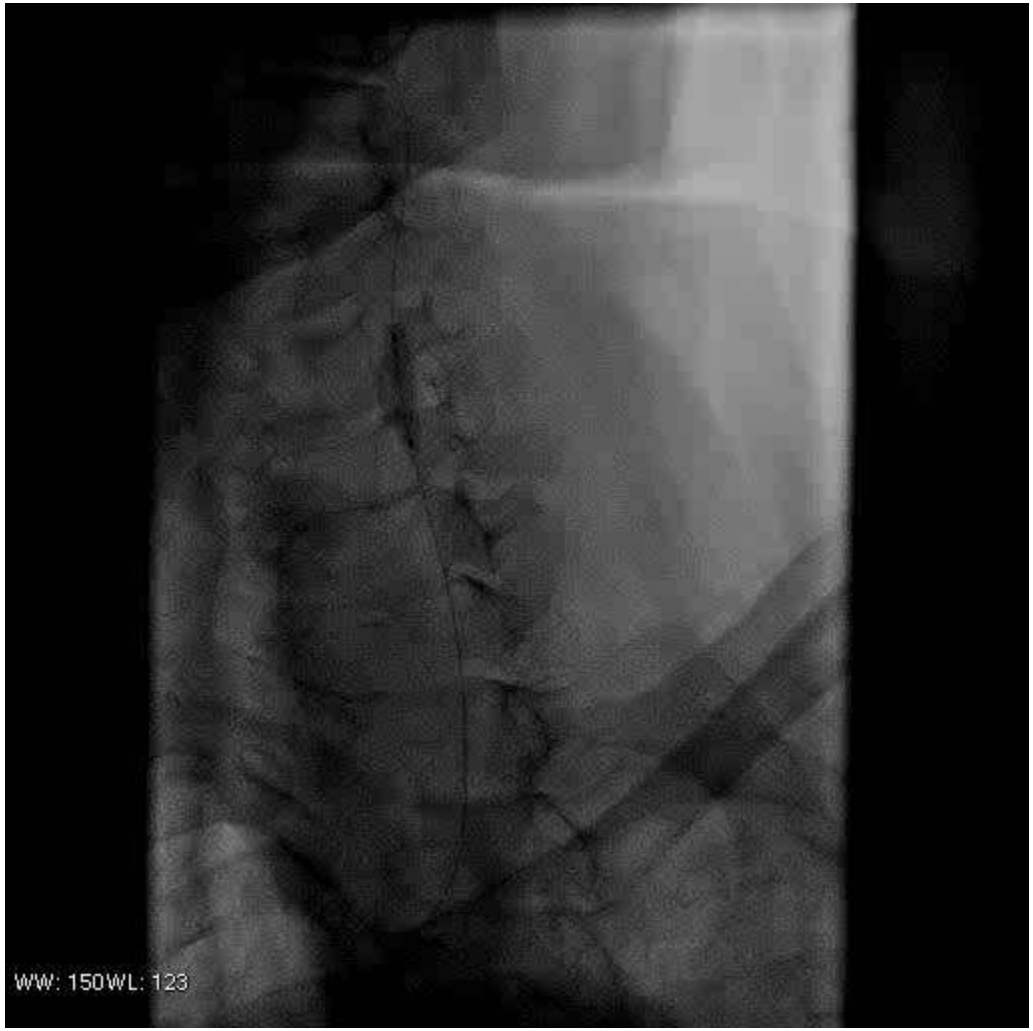
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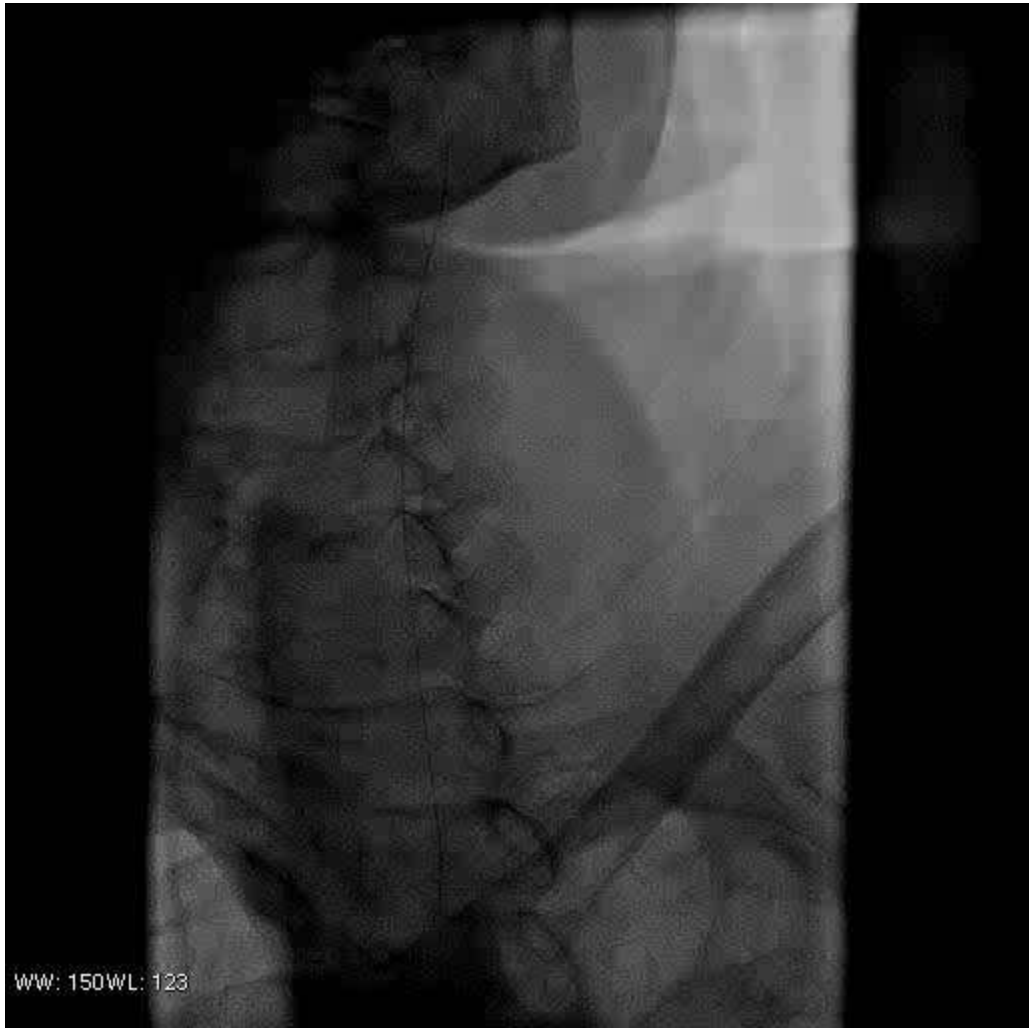
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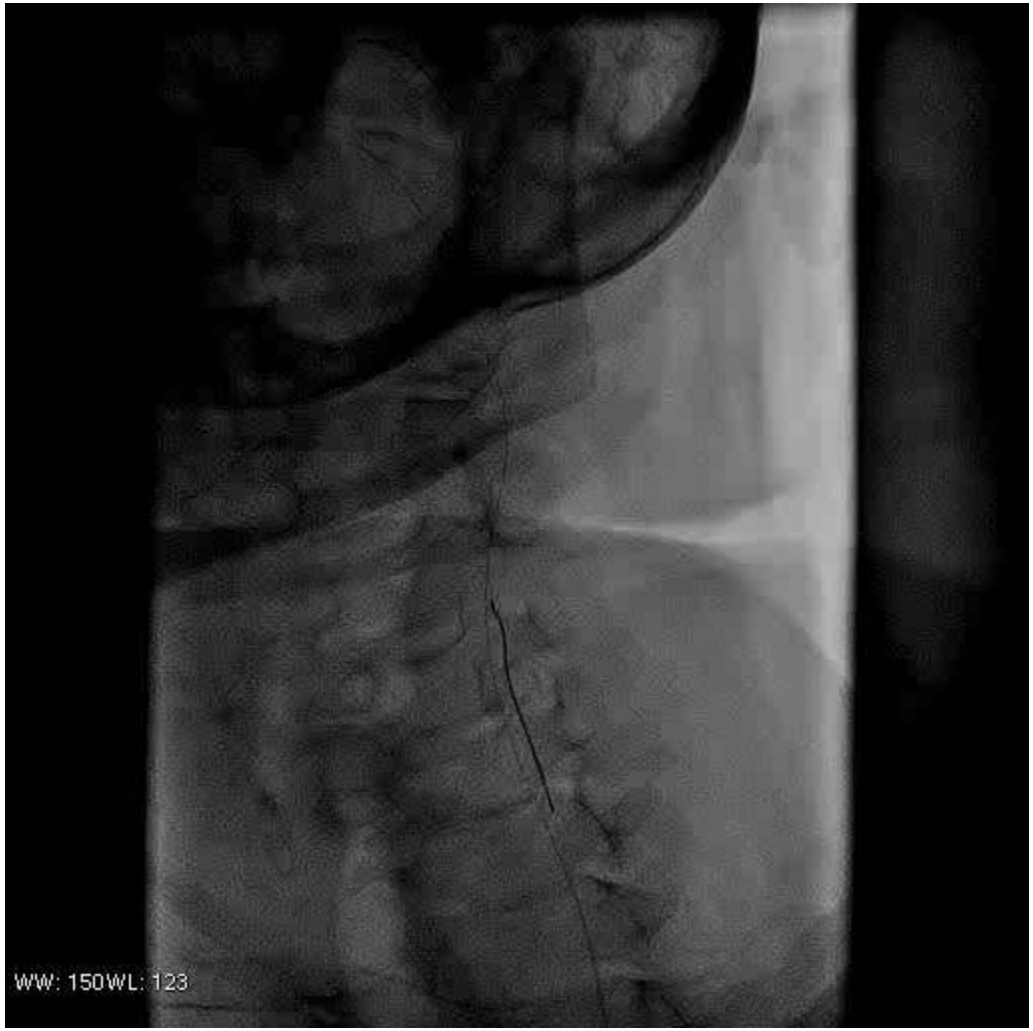
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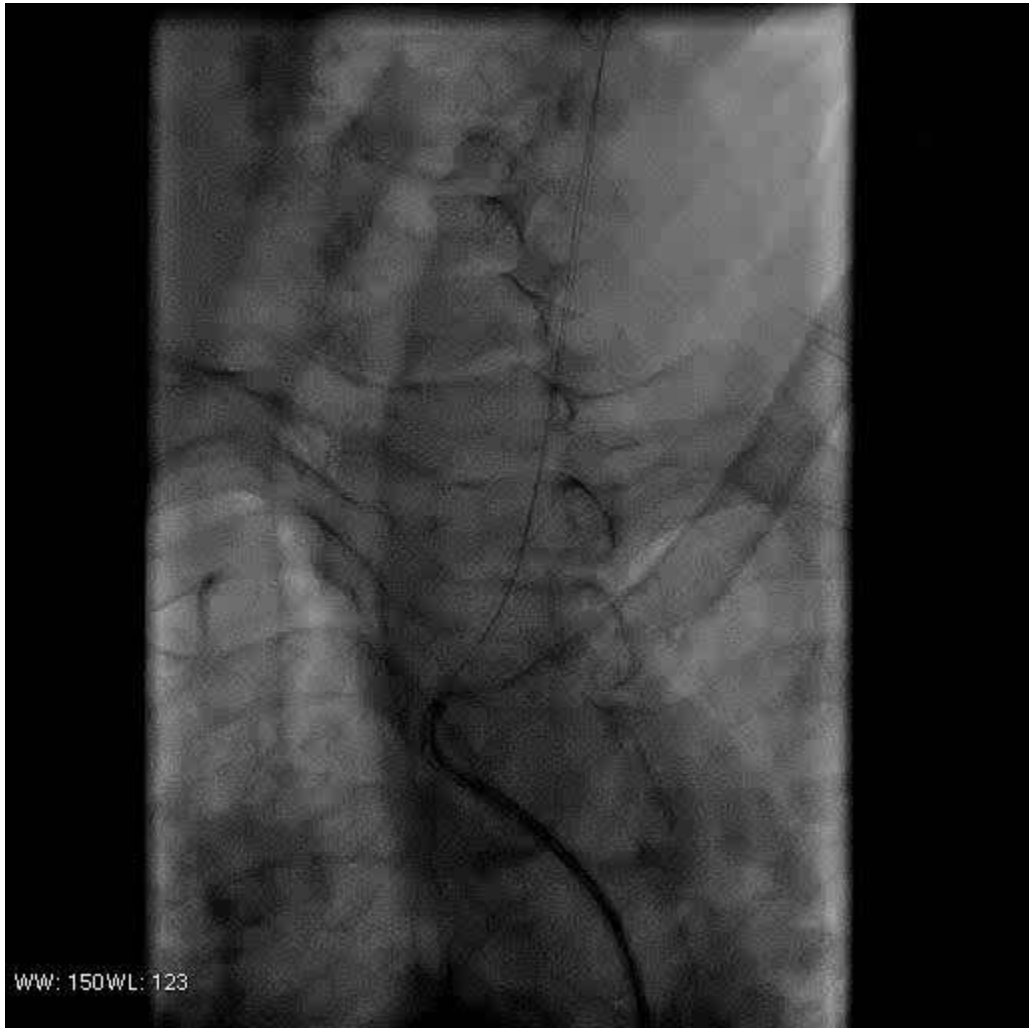
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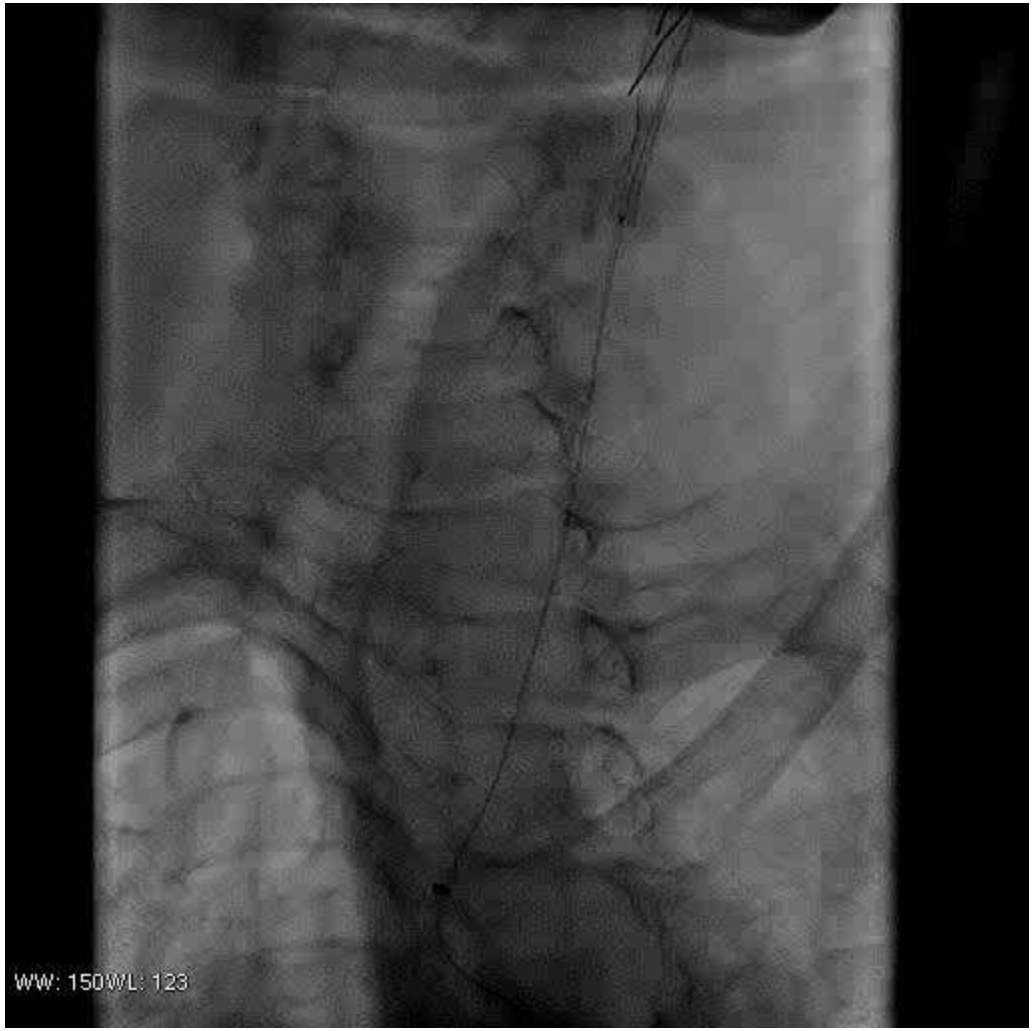
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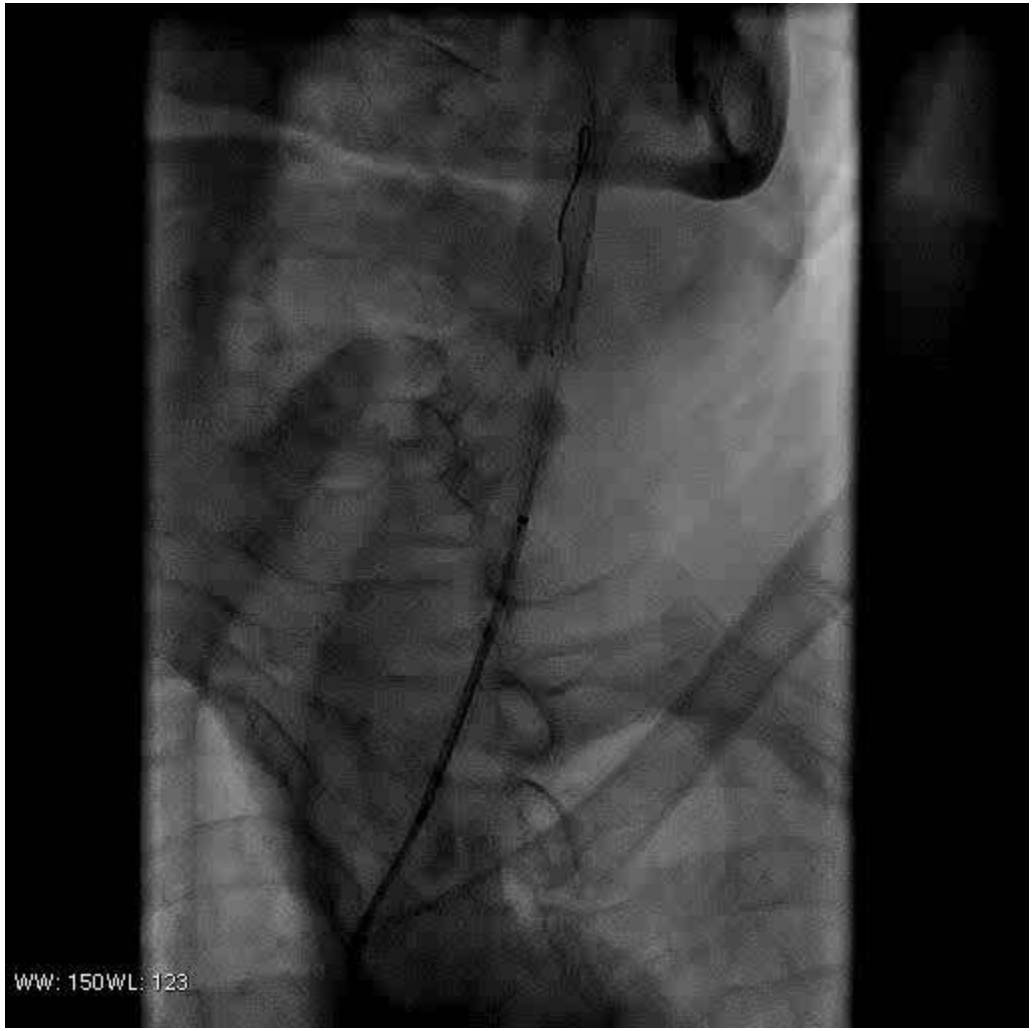
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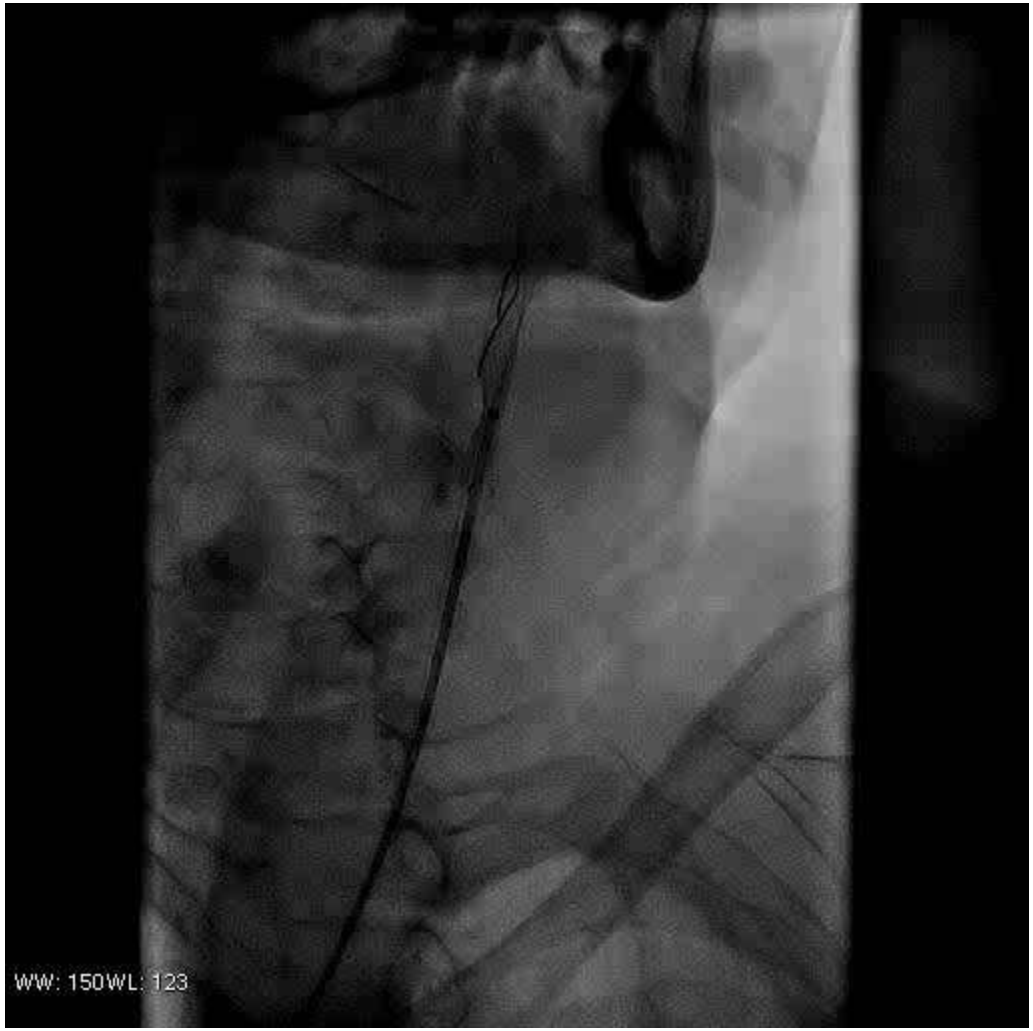
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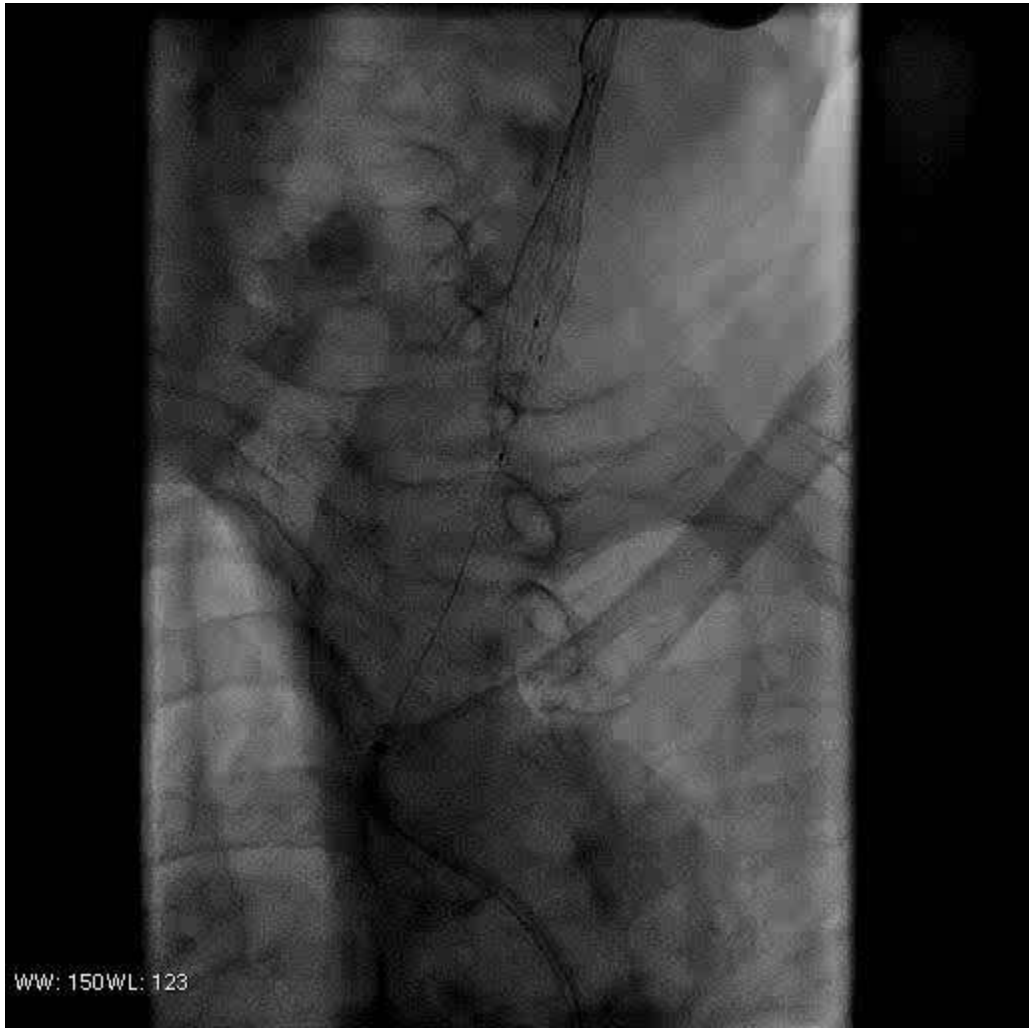
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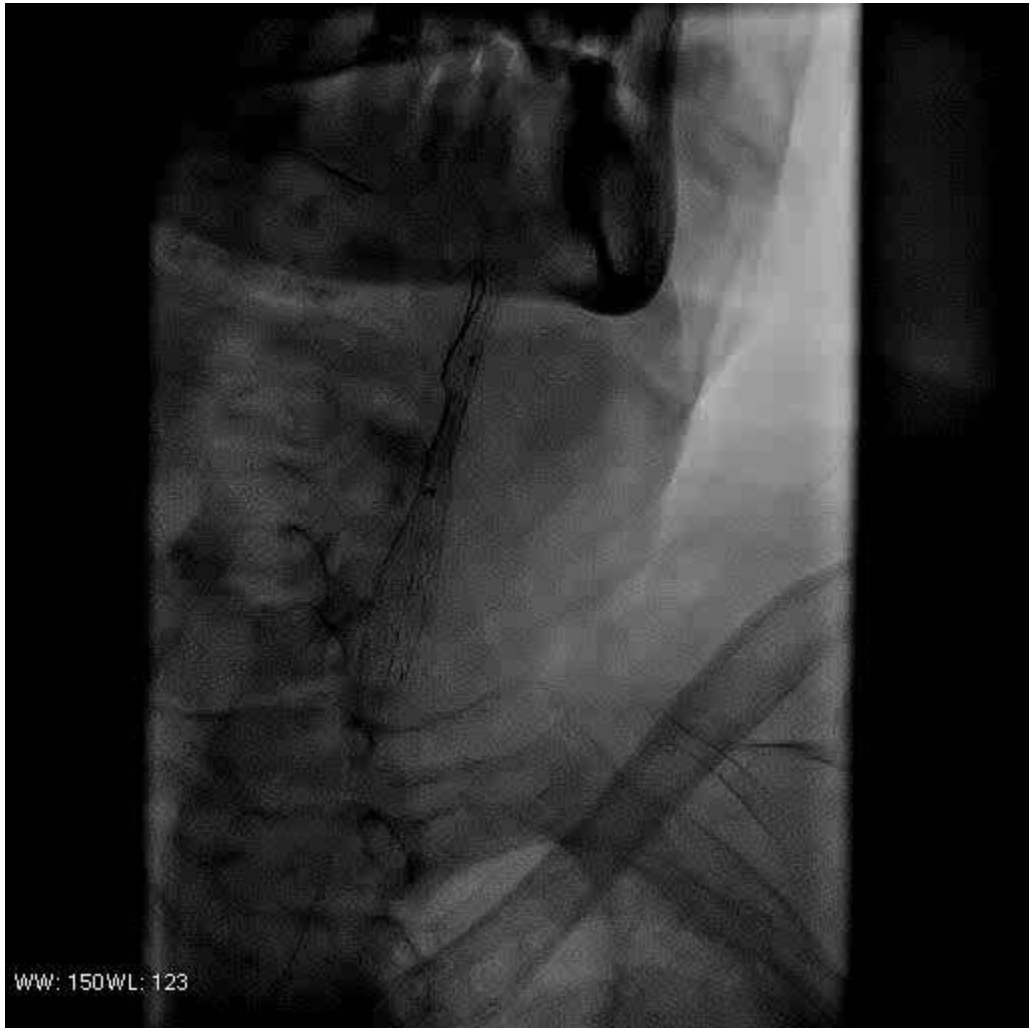
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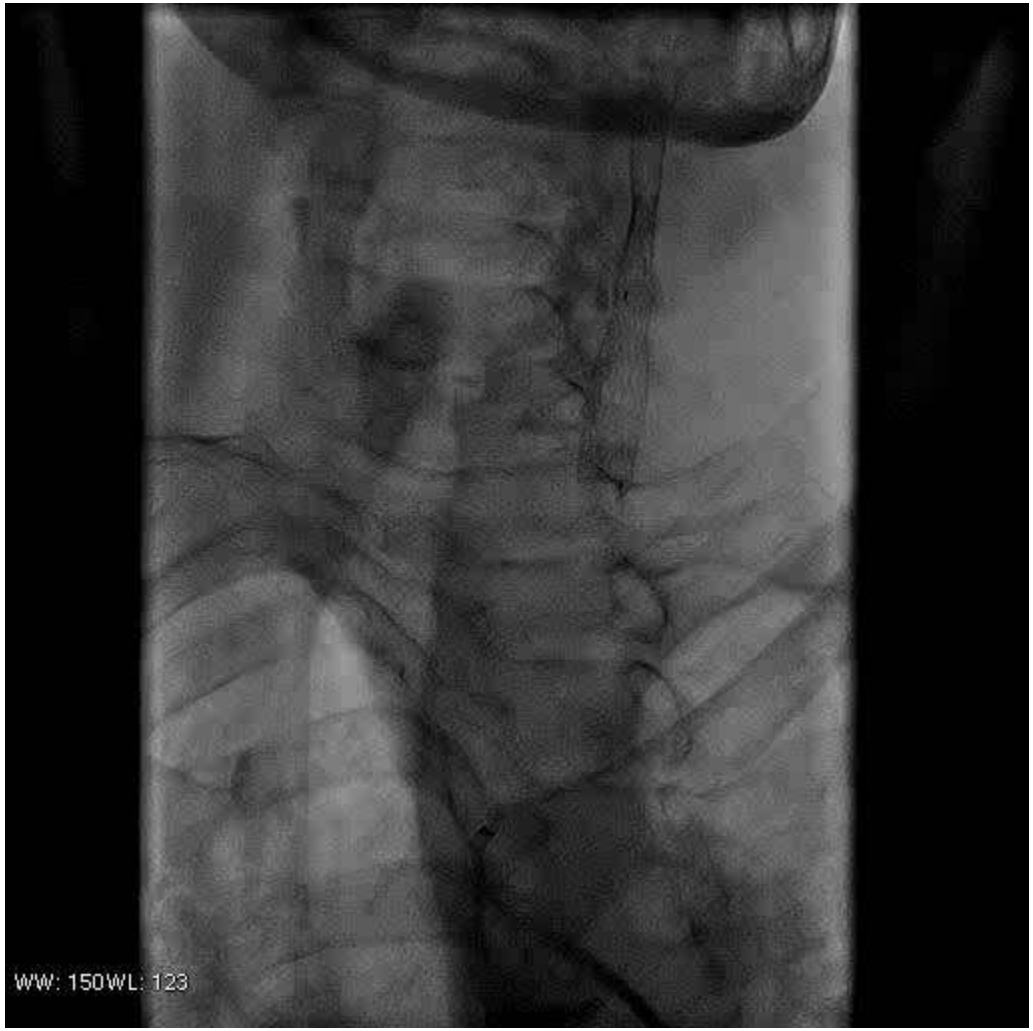
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THANK YOU!