

# VASCULAR INVESTIGATIONS

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**King Saud University Medical City**  
**King Saud University**

➤ Sensitive:

➤ Operator dependent:

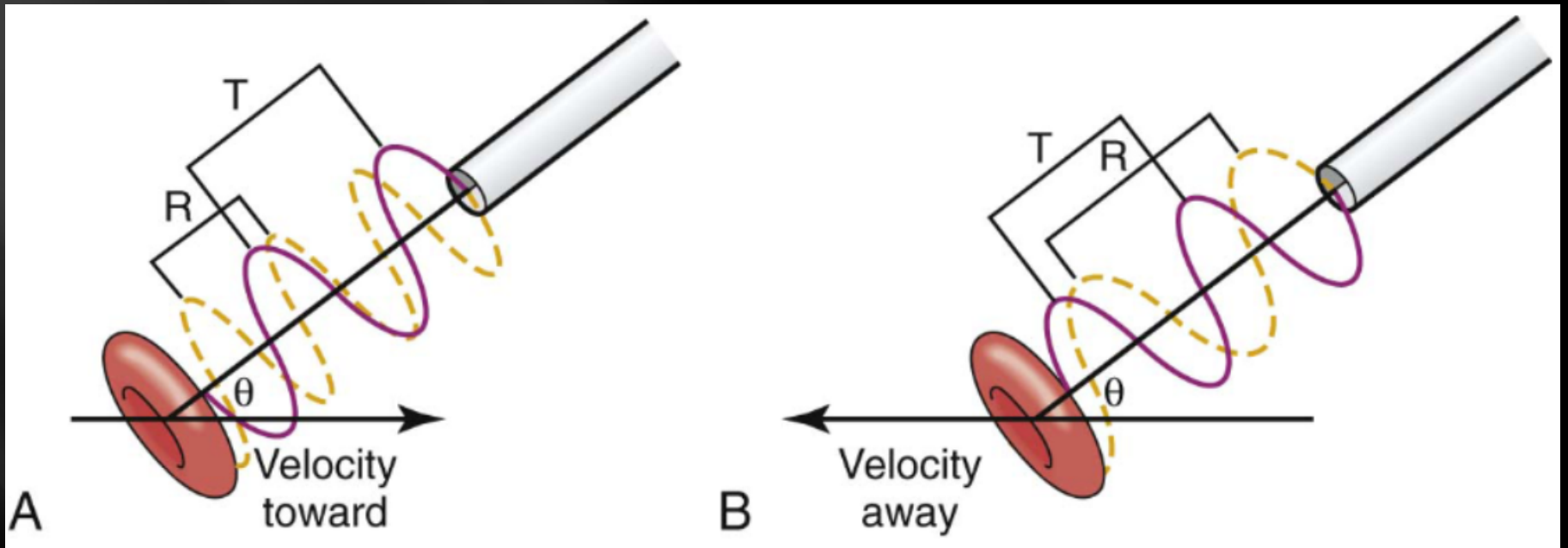
➤ Toxic:

➤ Therapeutic:

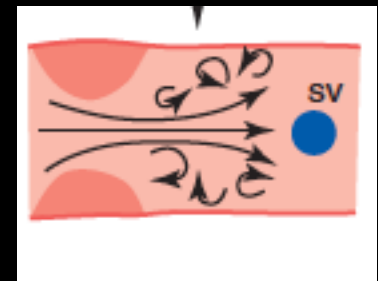
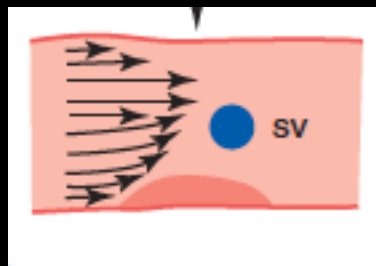
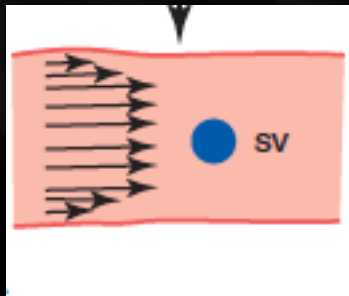
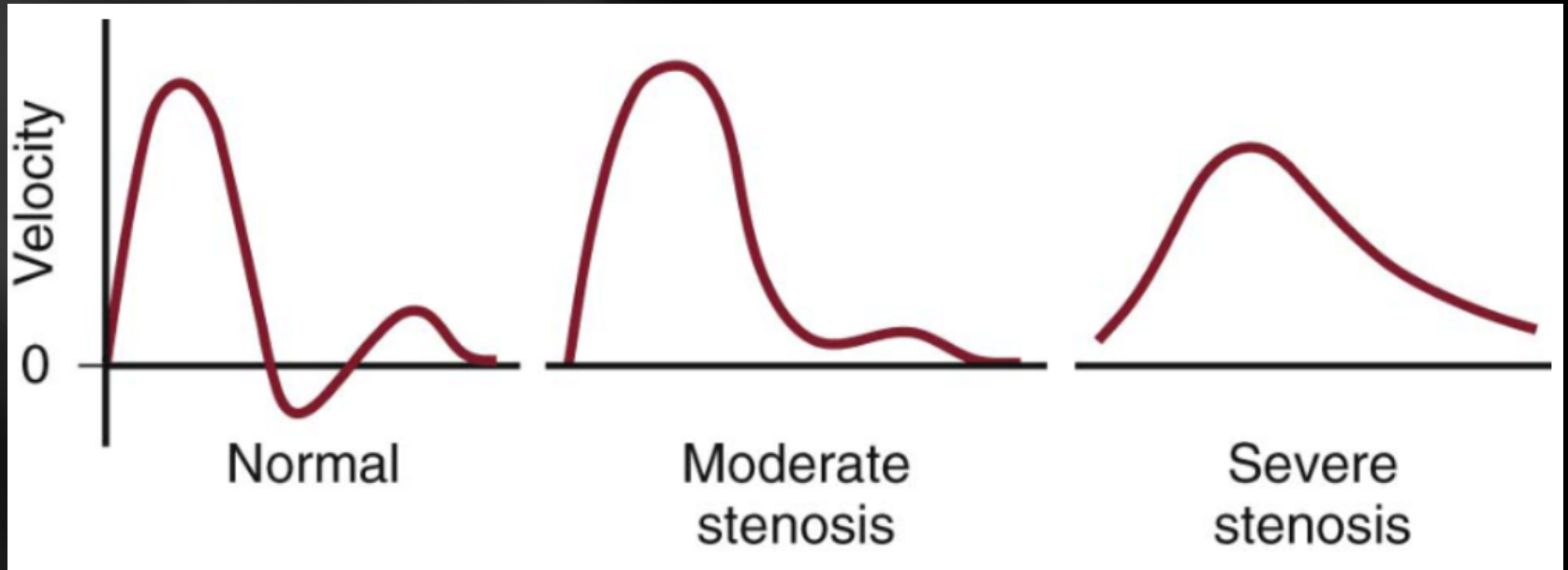
# HANDHELD DOPPLER



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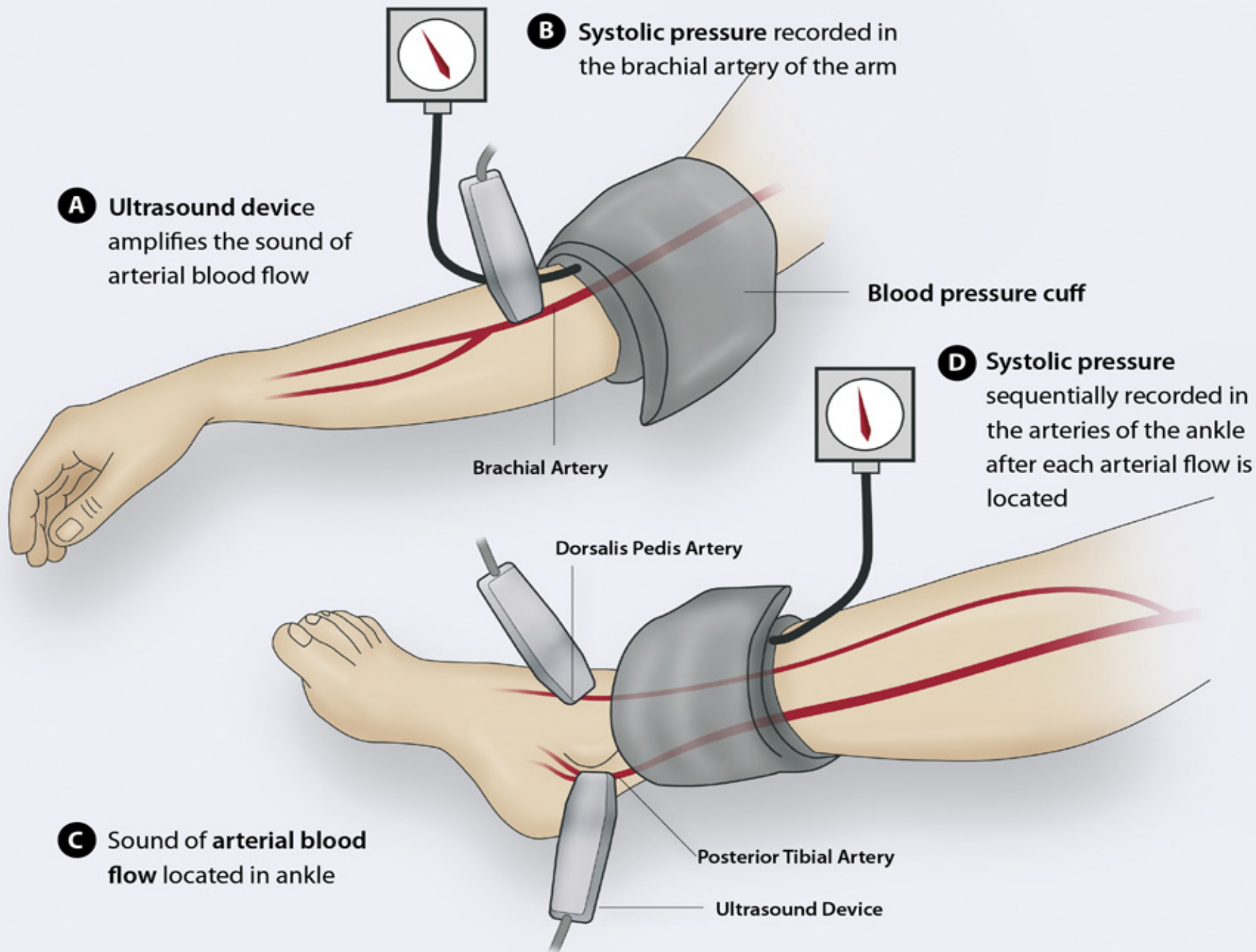
# HANDHELD DOPPLER



# ANKLE BRACHIAL INDEX



$ABI = \text{ANKLE SBP (PT OR DP)} / \text{HIGHEST ARM SBP}$



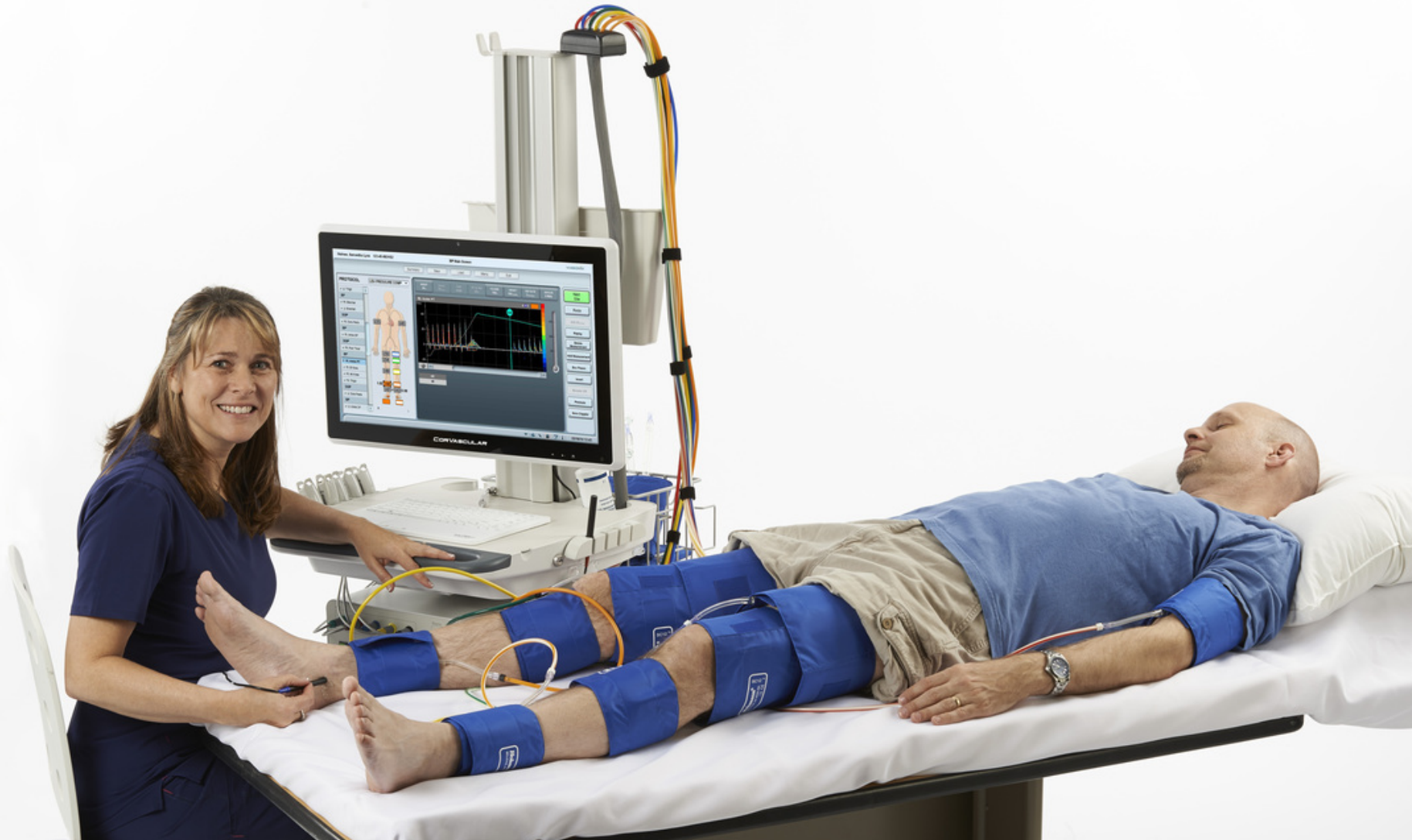
## Interpretation of ABI

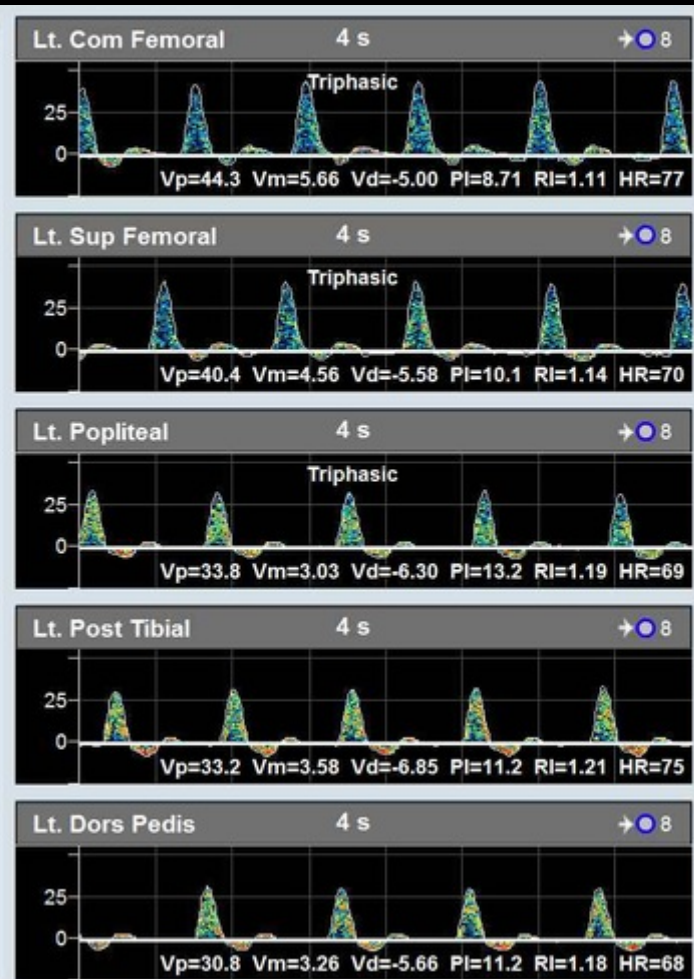
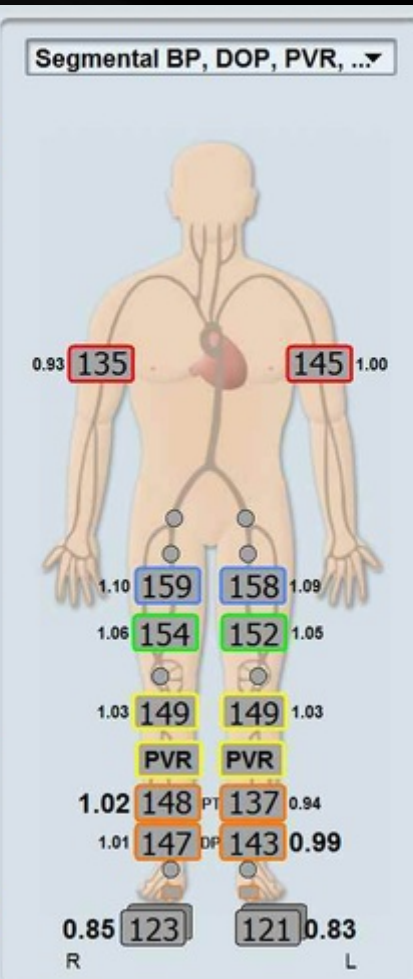
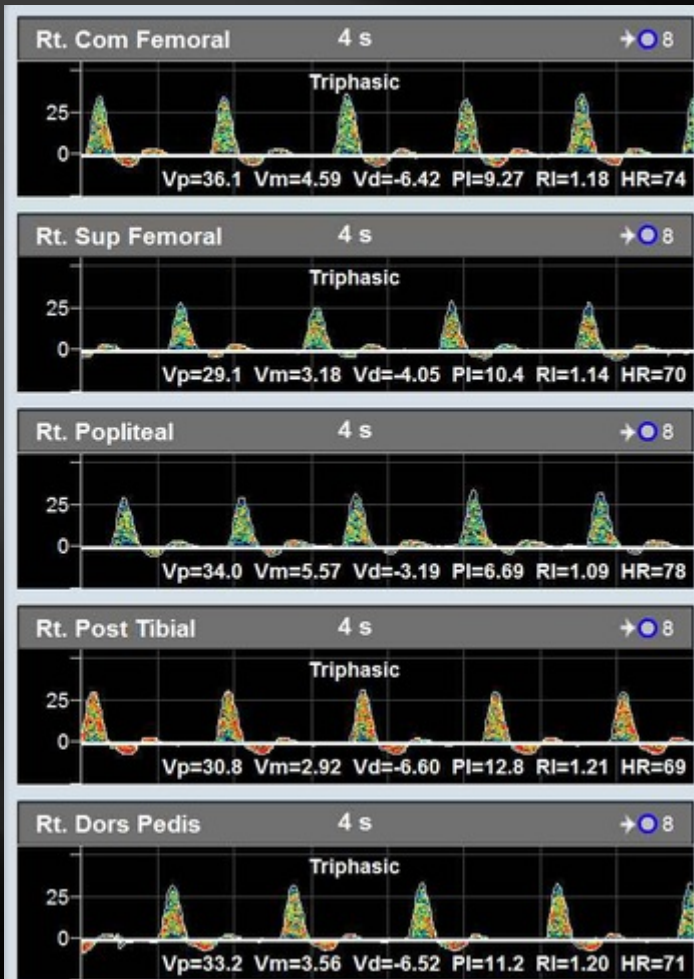
>1.30	Noncompressible
1.00–1.29	Normal
0.91–0.99	Borderline (equivocal)
0.41–0.90	Mild to moderate peripheral arterial disease
0.00–0.40	Severe peripheral arterial disease

The ABI has limited use in evaluating calcified vessels that are not compressible as in Diabetics



# SEGMENTAL PRESSURE





➤ Sensitive: ✓

➤ Operator dependent: ✓✓✓

➤ Toxic: ✗

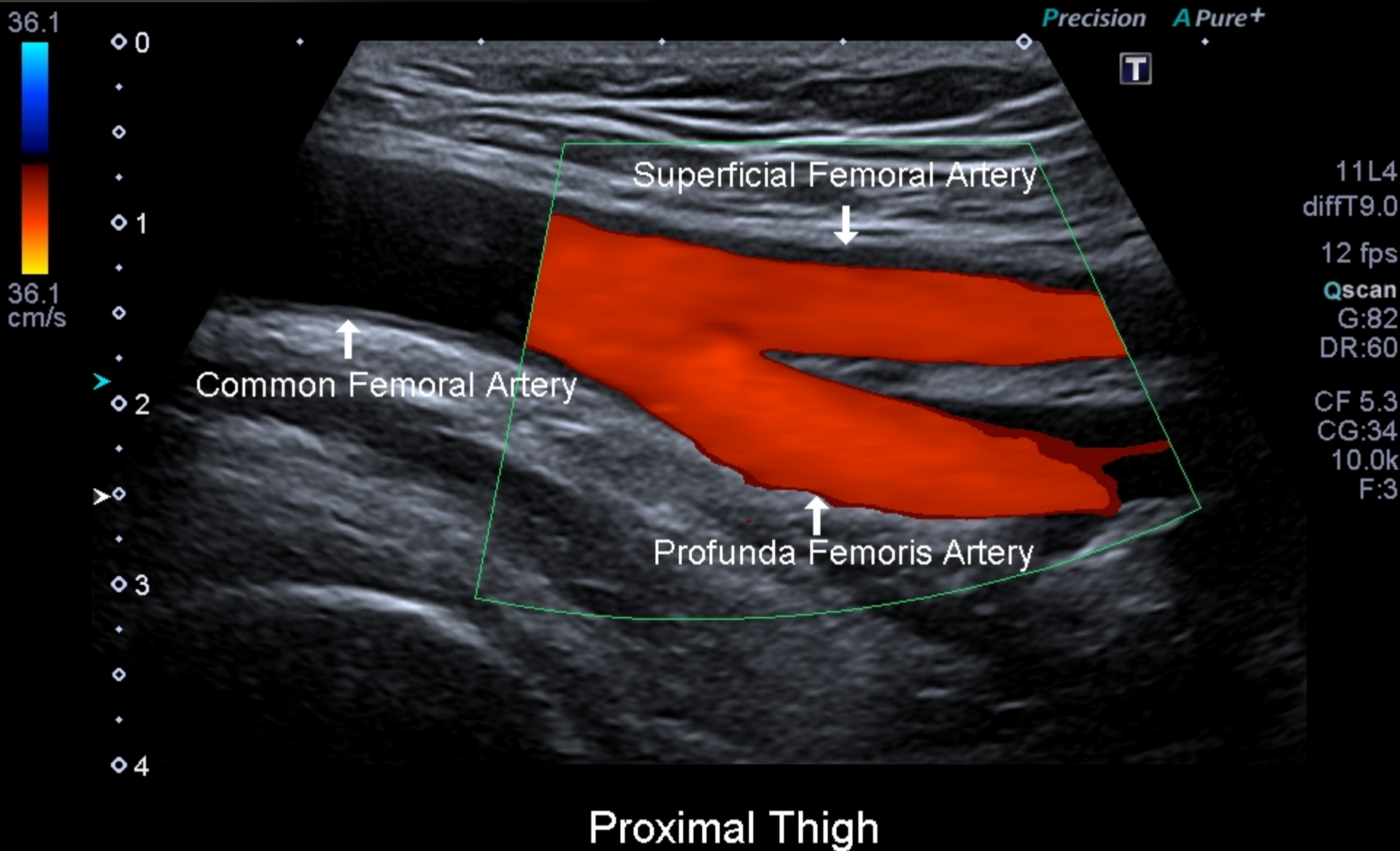
➤ Therapeutic: ✗

# DUPLEX ULTRASOUND

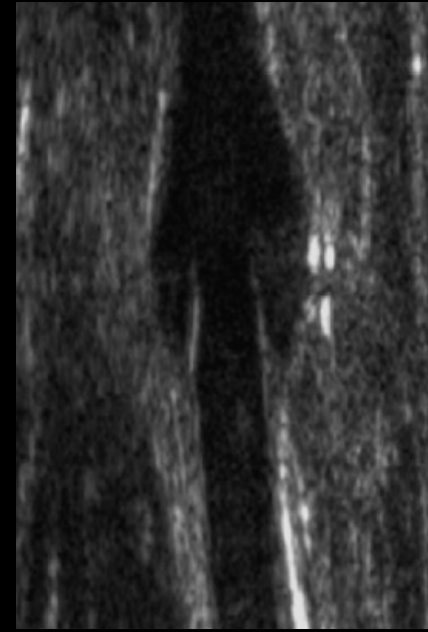
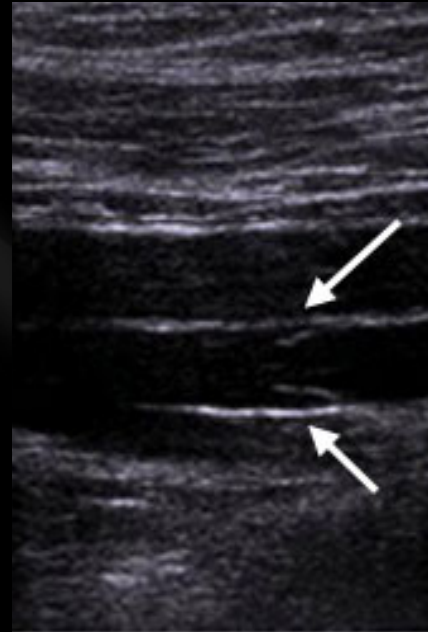
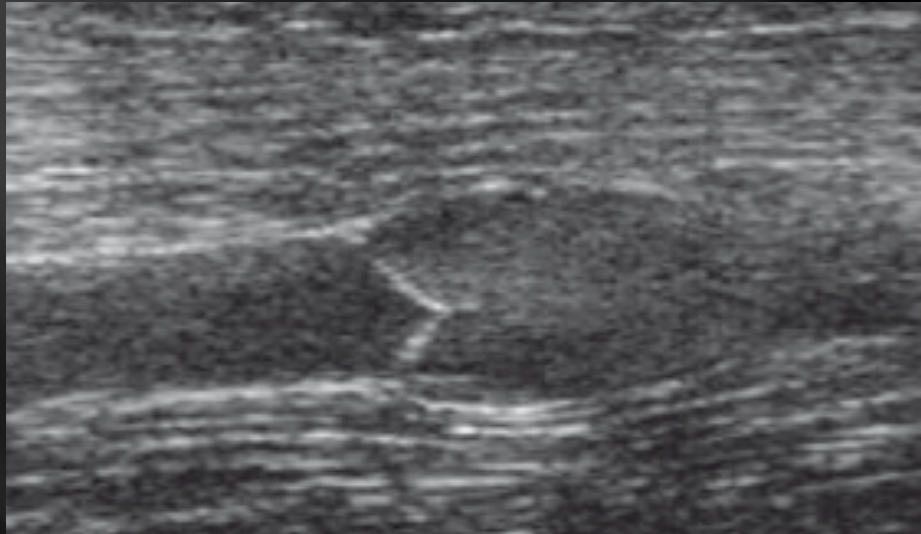
B - mode + Color Doppler



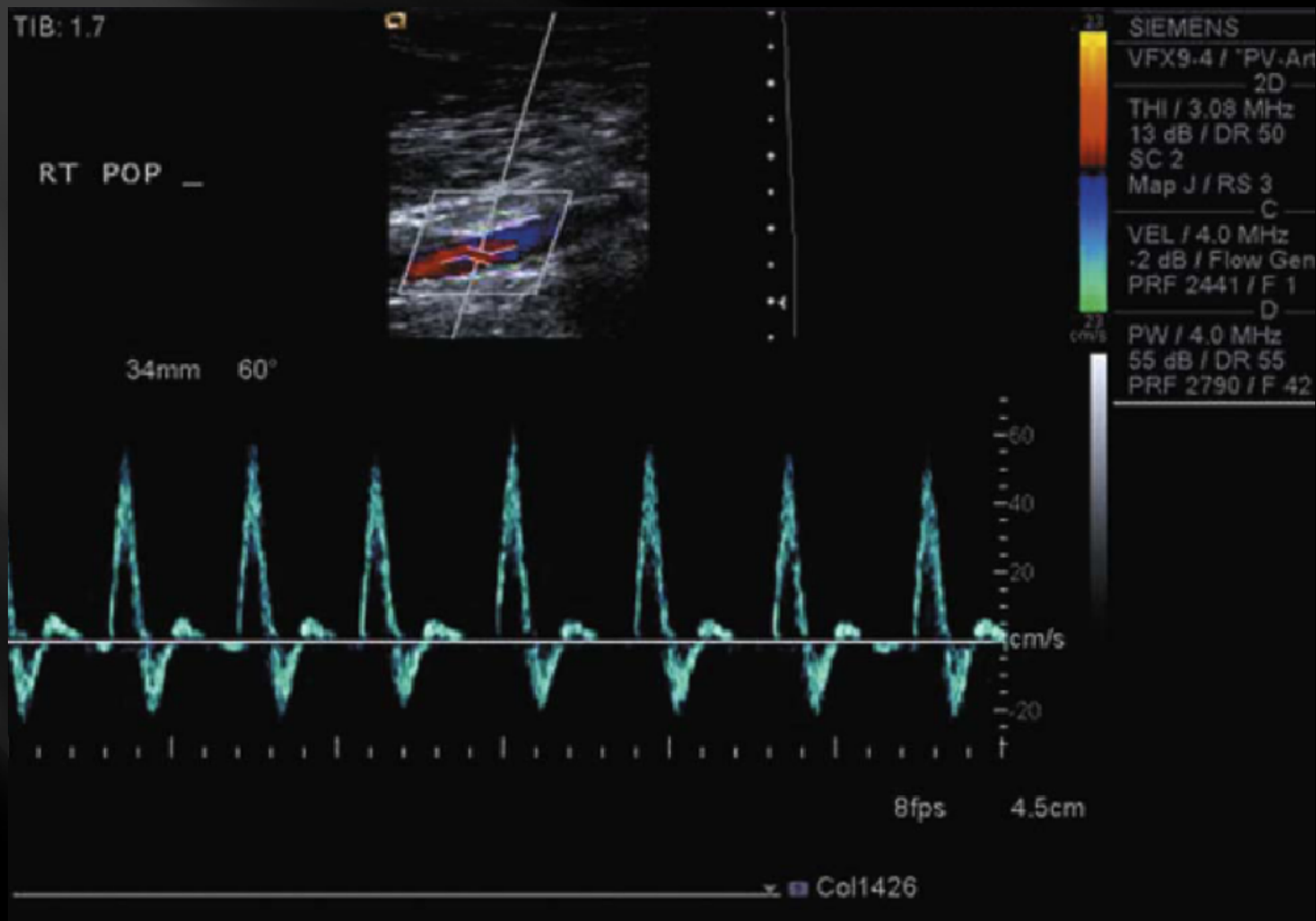
# DUPLEX ULTRASOUND



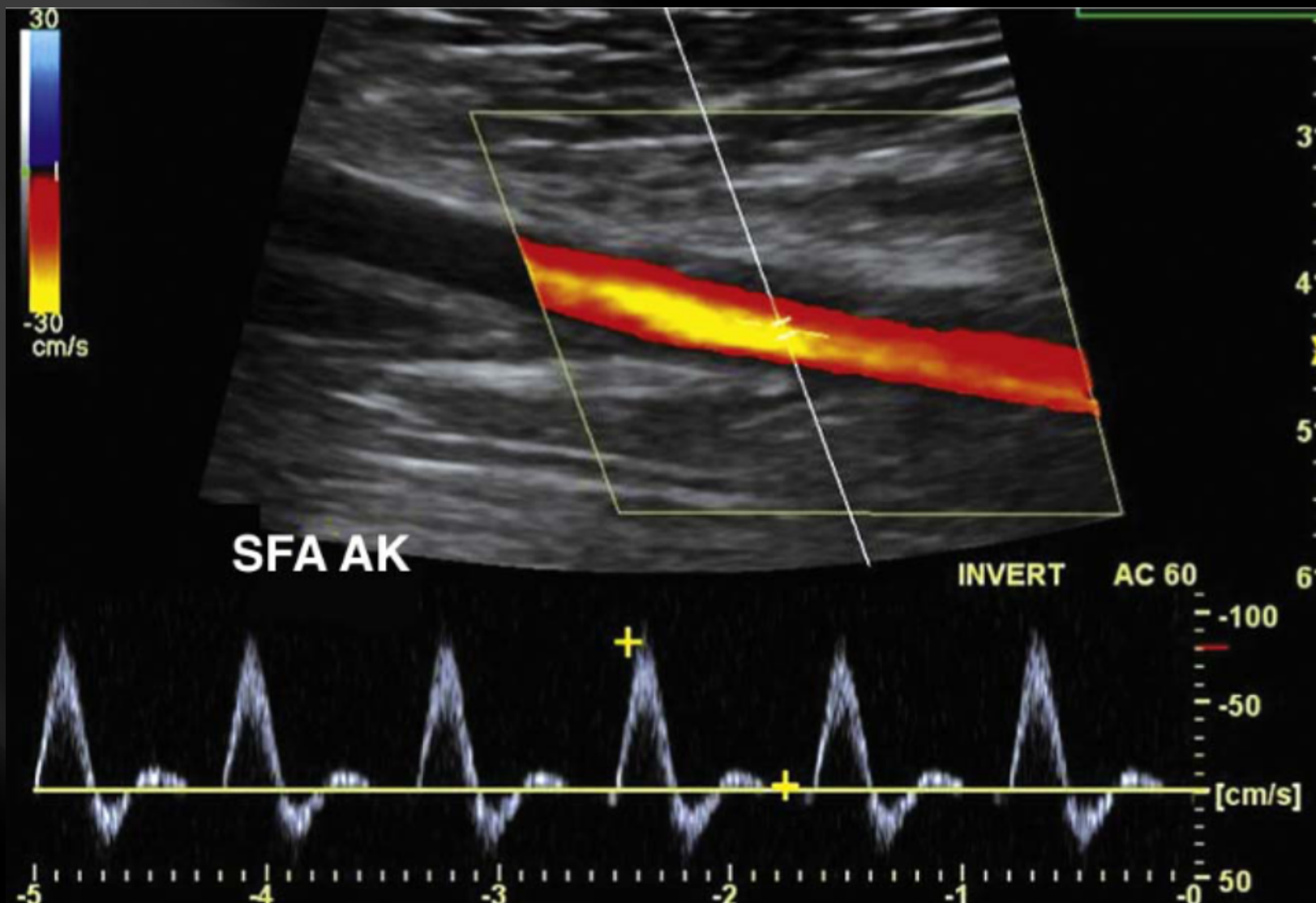
# DUPLEX ULTRASOUND



# DUPLEX ULTRASOUND

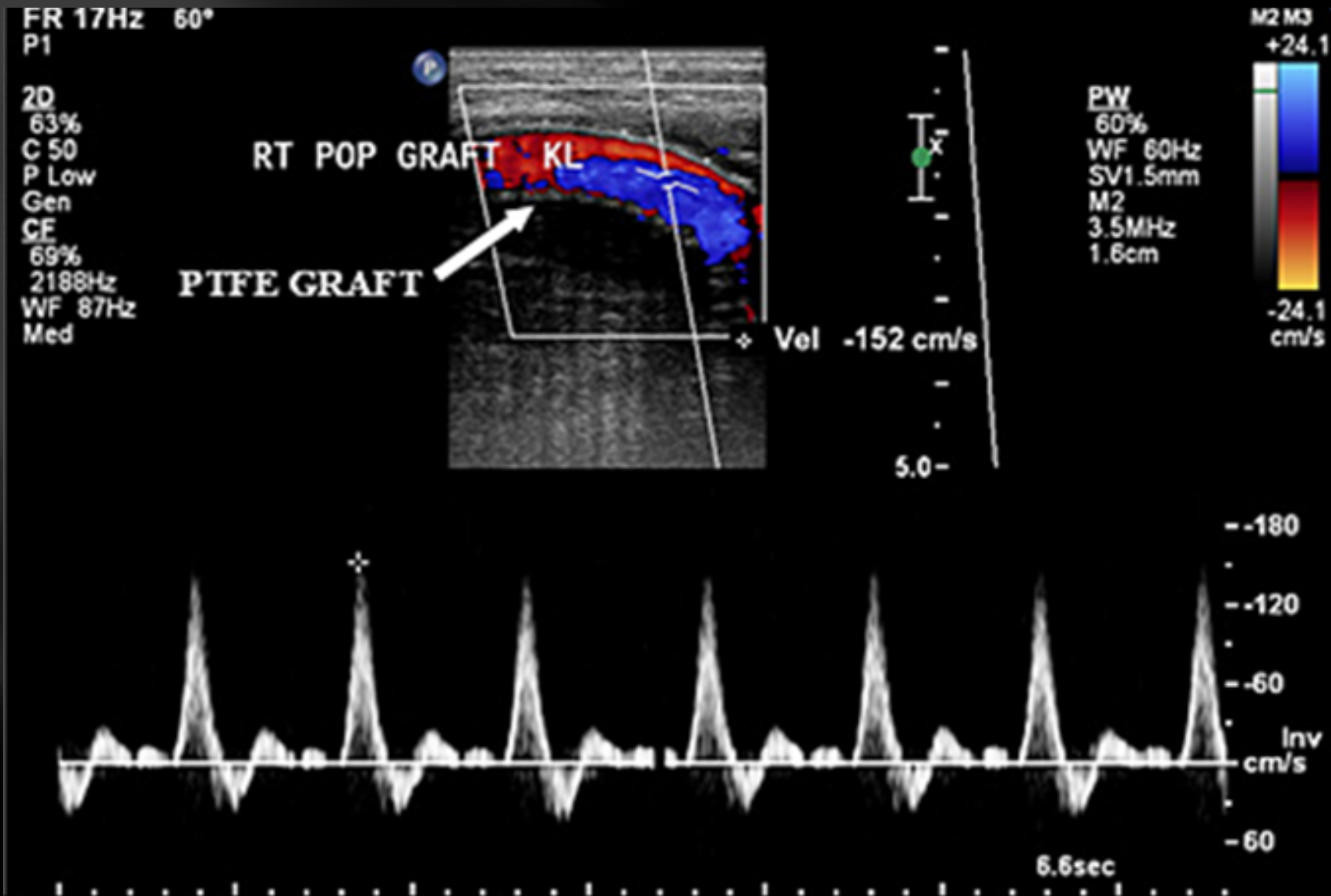


# DUPLEX ULTRASOUND





# DUPLEX ULTRASOUND



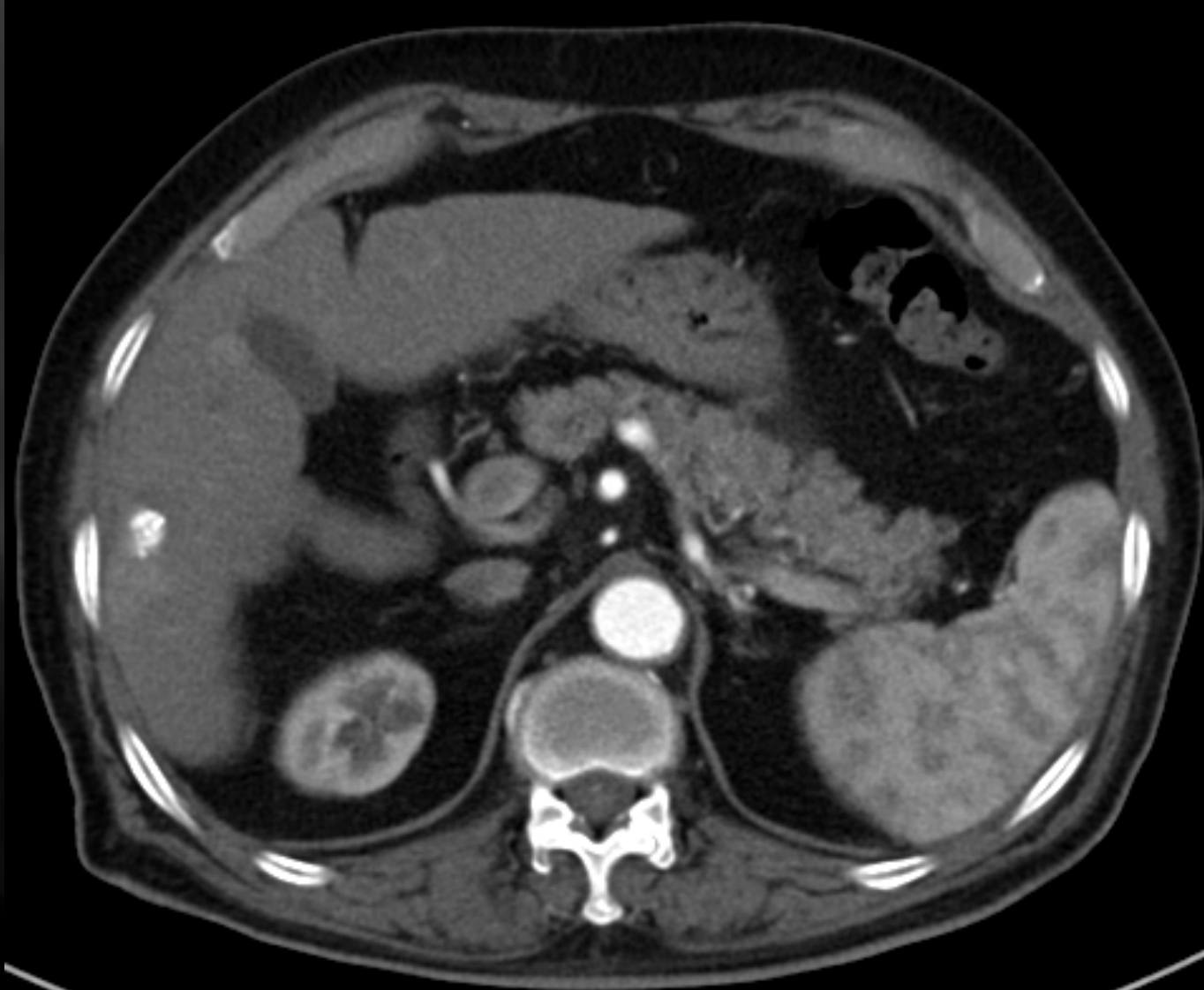
➤ Sensitive: ✓✓✓

➤ Operator dependent: ✓✓✓

➤ Toxic: ✗

➤ Therapeutic: ✗

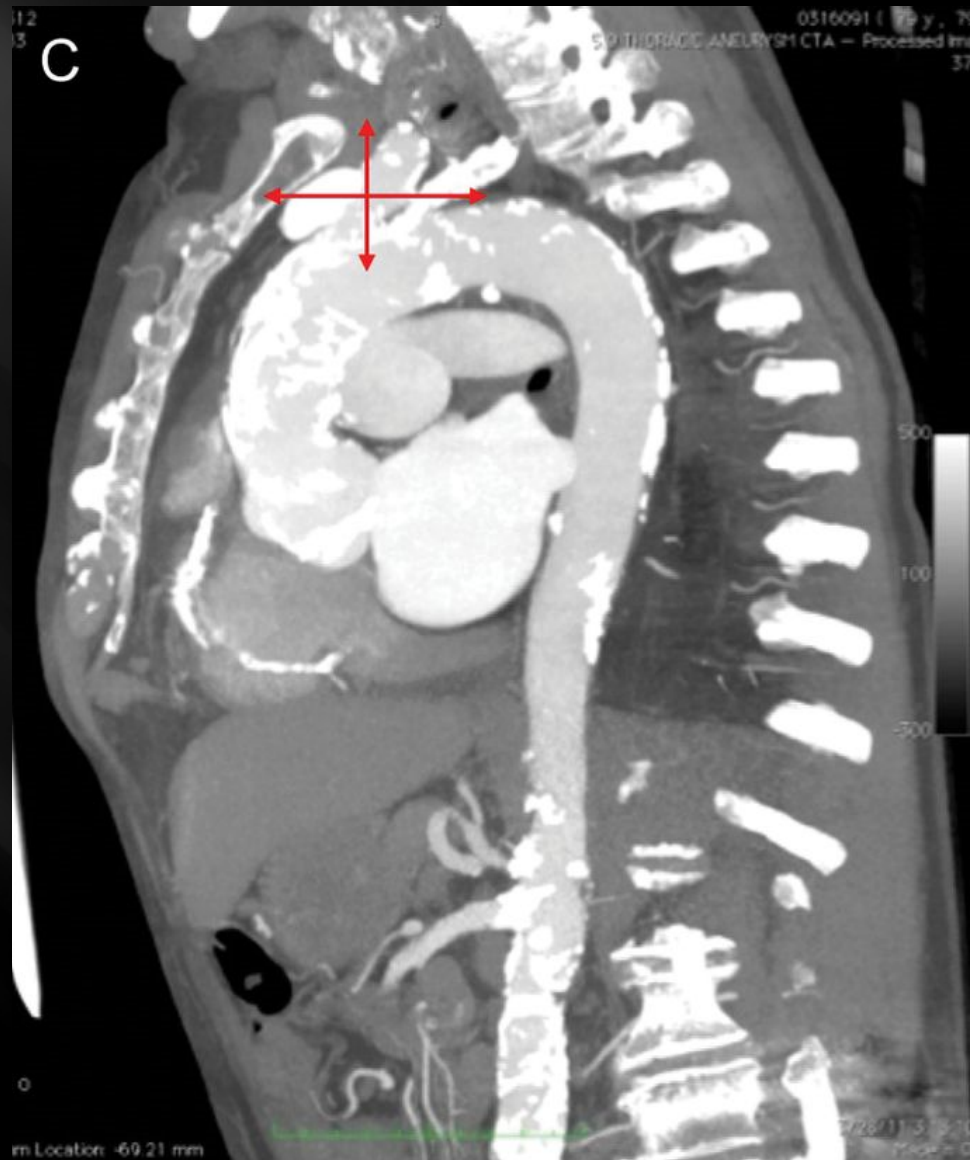
# CT ANGIOGRAM



# CT ANGIOGRAM



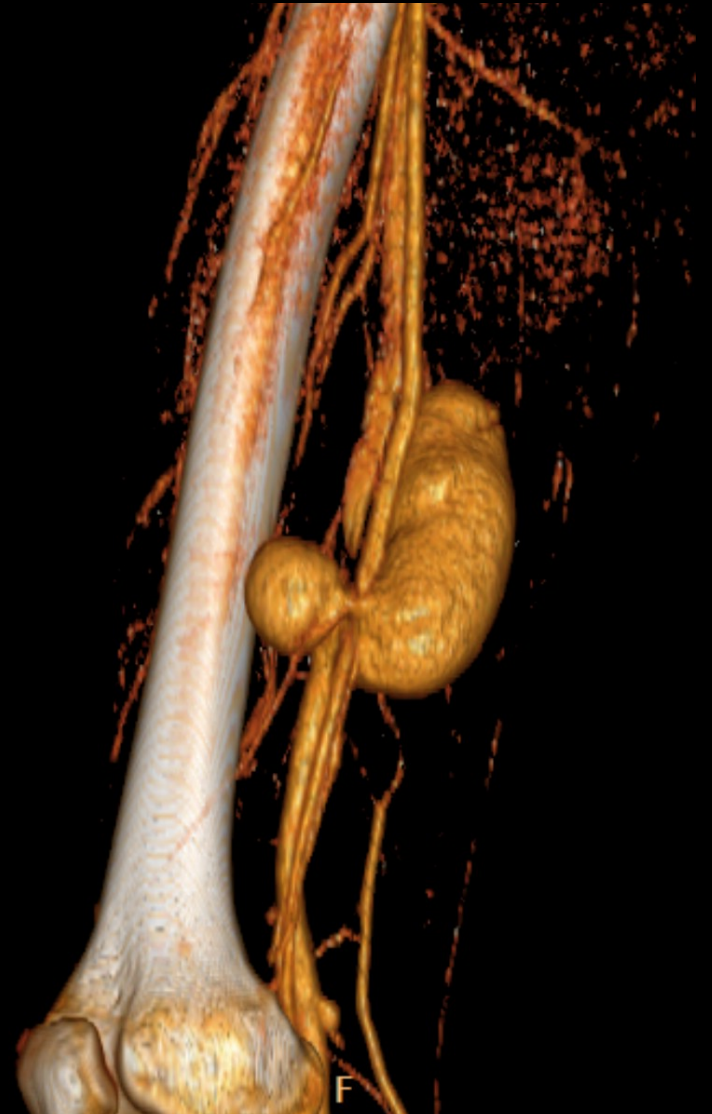
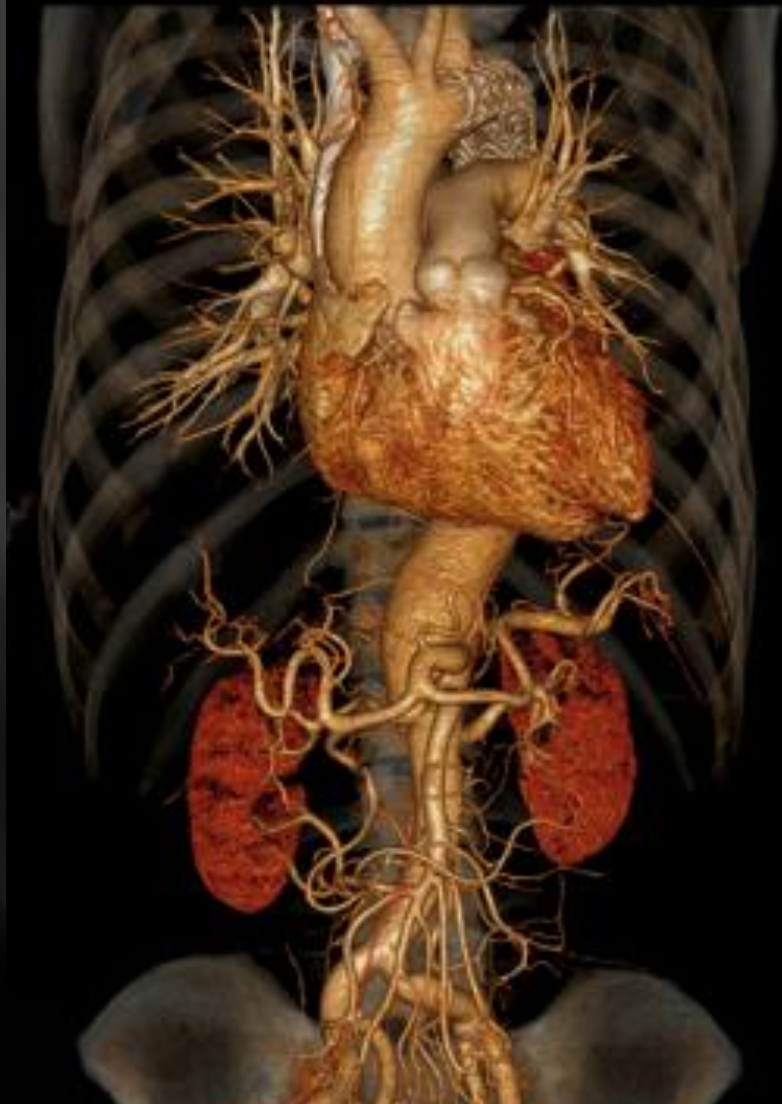
# CT ANGIOGRAM



# CT ANGIOGRAM



# CT ANGIOGRAM



# CT ANGIOGRAM





➤ Sensitive: ✓✓✓✓✓

➤ Operator dependent: ✗

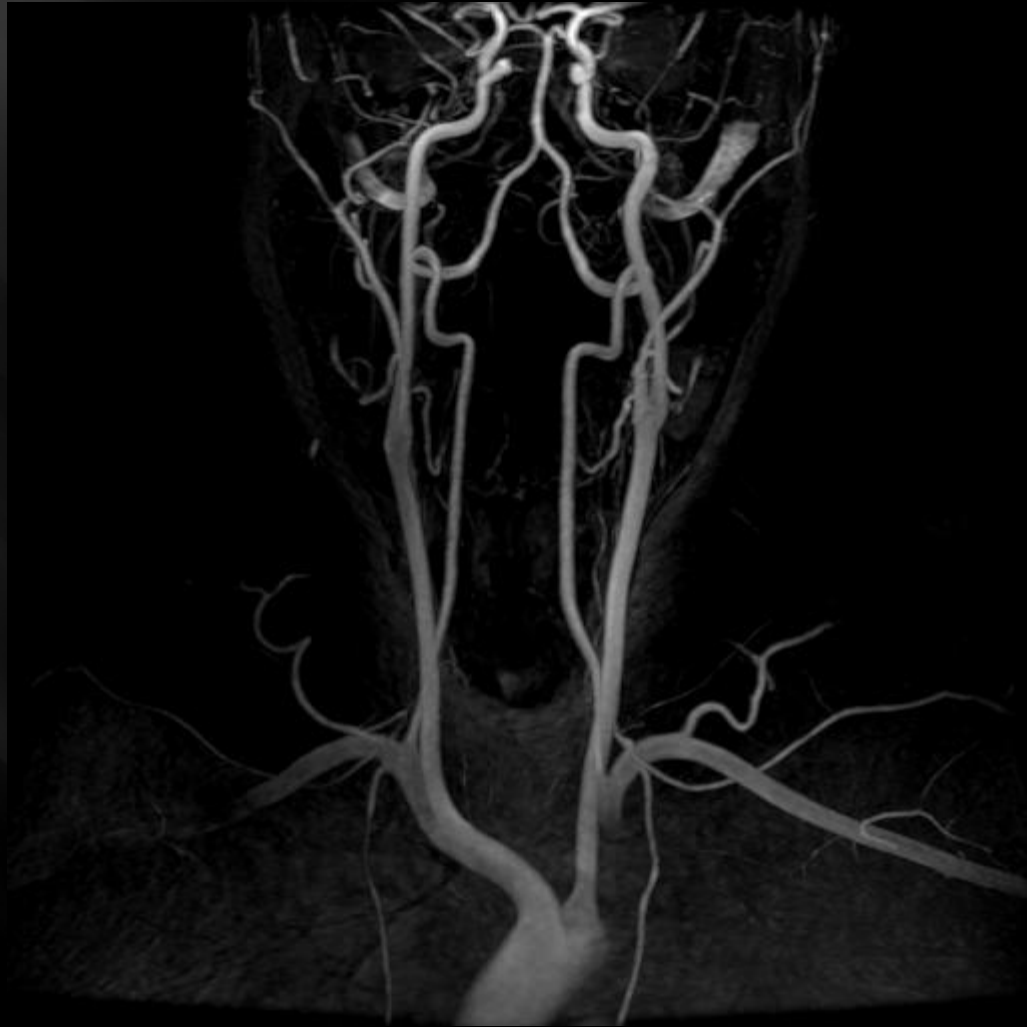
➤ Toxic: ✓✓✓

➤ Therapeutic: ✗

# MR ANGIOGRAM



# MR ANGIOGRAM



➤ Sensitive: ✓✓✓✓

➤ Operator dependent: ✗

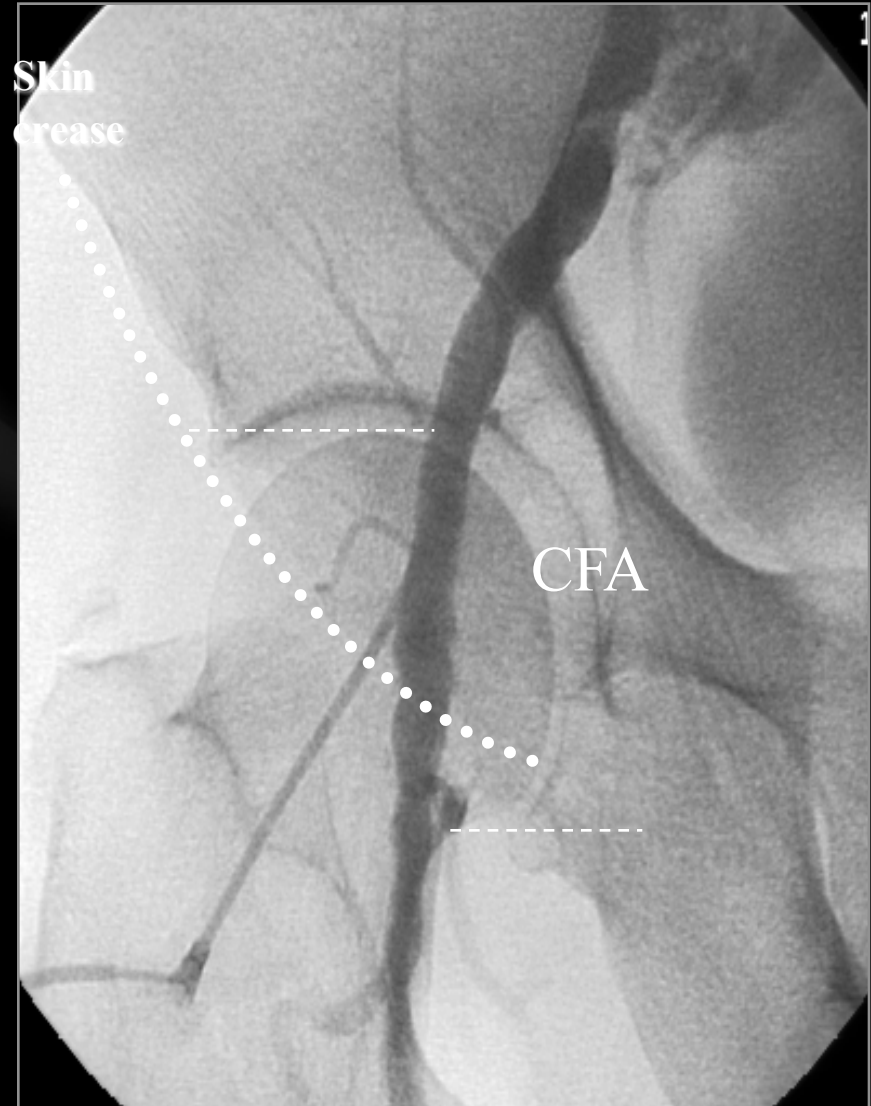
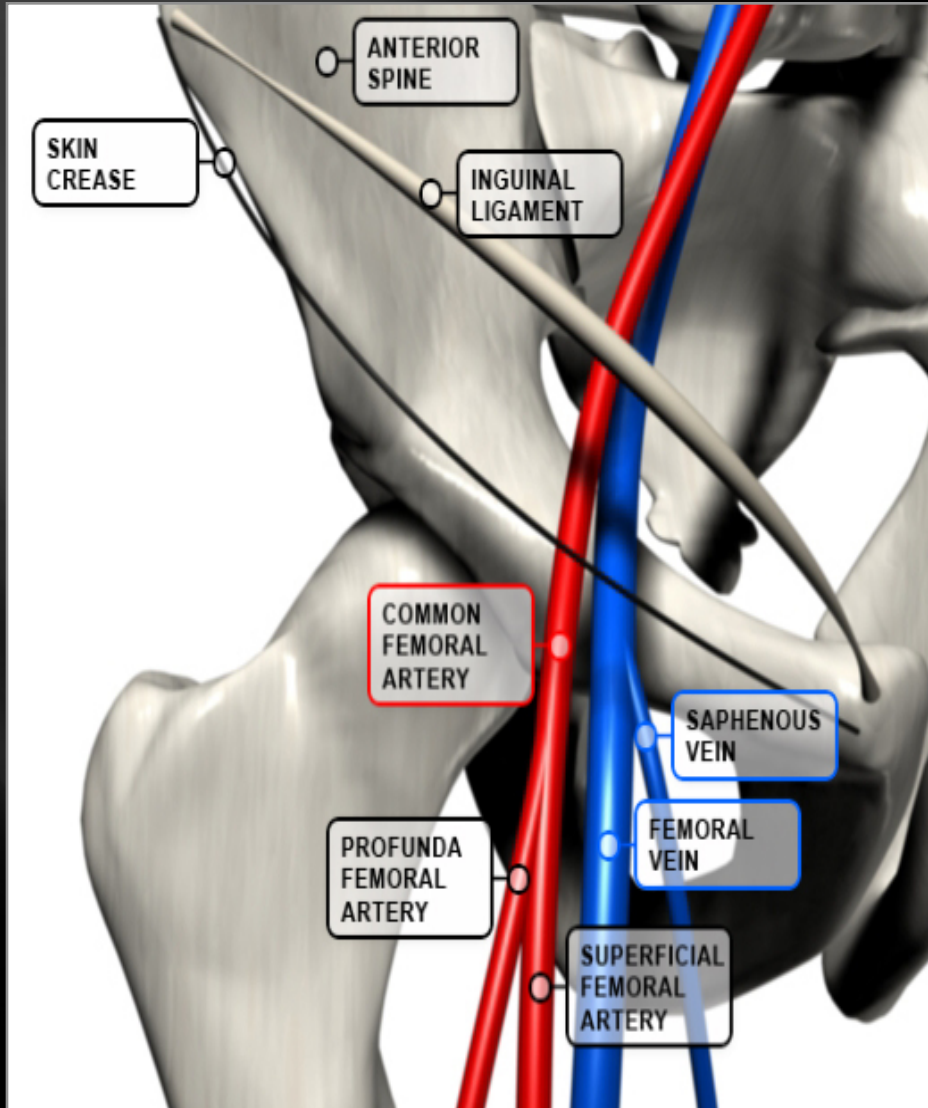
➤ Toxic: ✓✓✓

➤ Therapeutic: ✗

# ANGIOGRAPHY



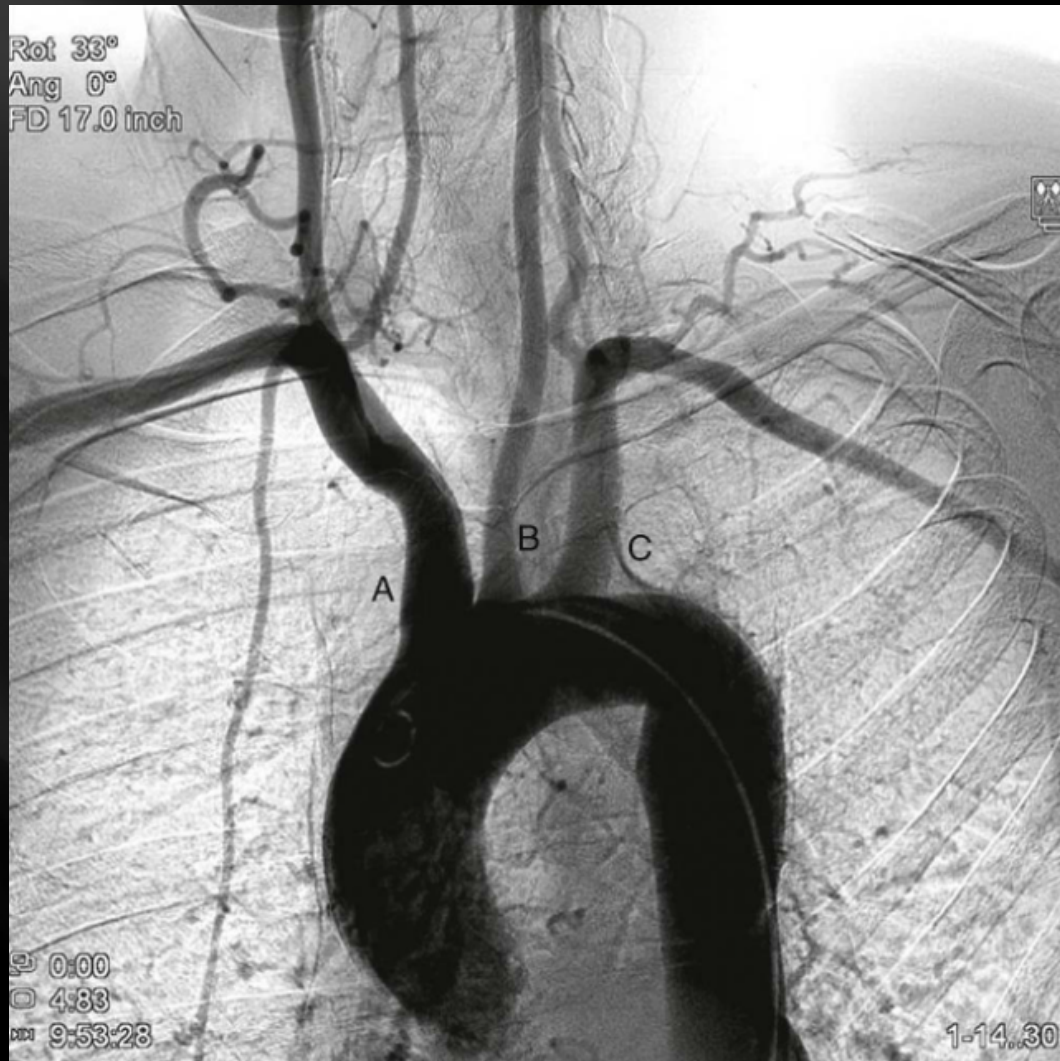
# Femoral Artery



# ANGIOGRAPHY



# ANGIOGRAPHY





# ANGIOGRAPHY



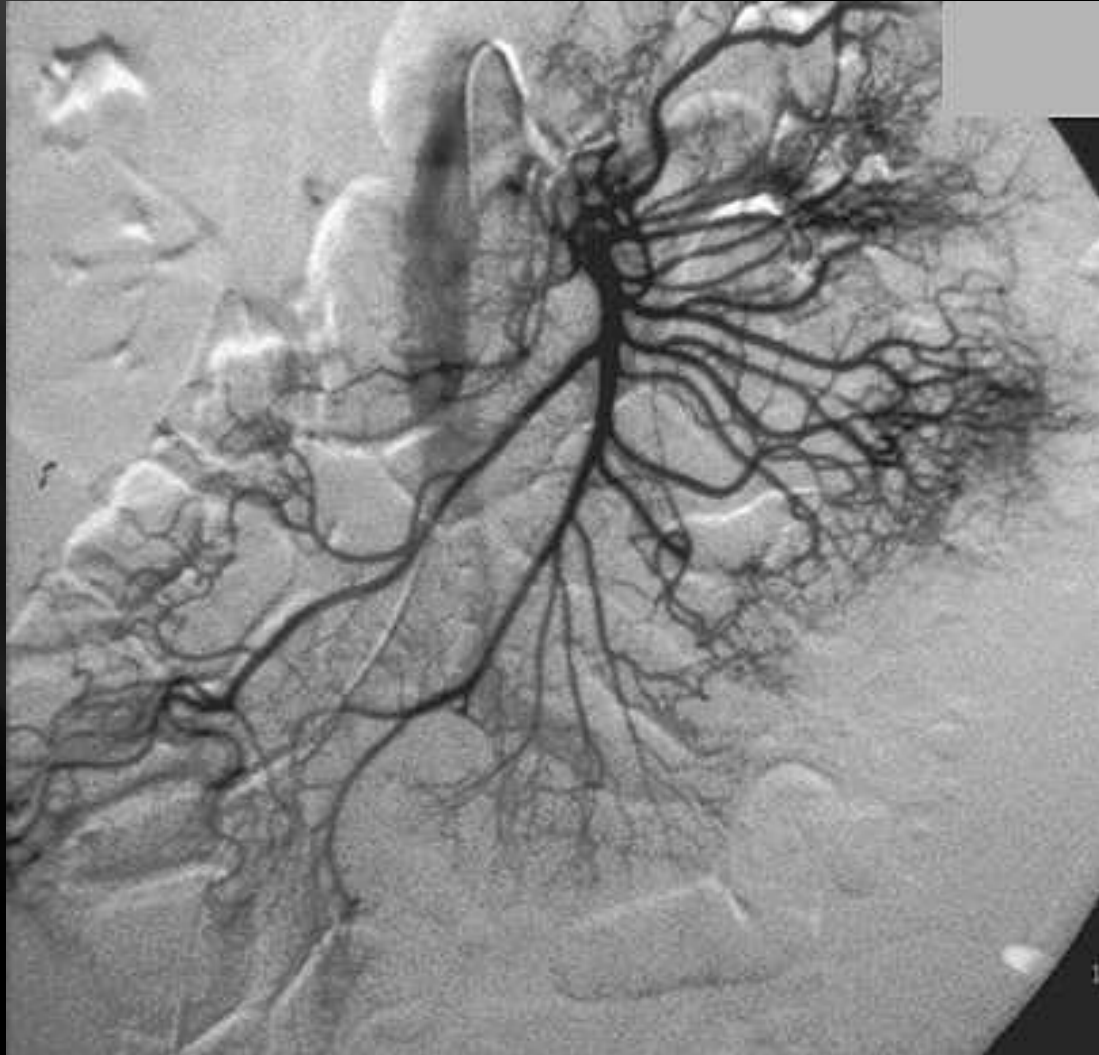
# ANGIOGRAPHY



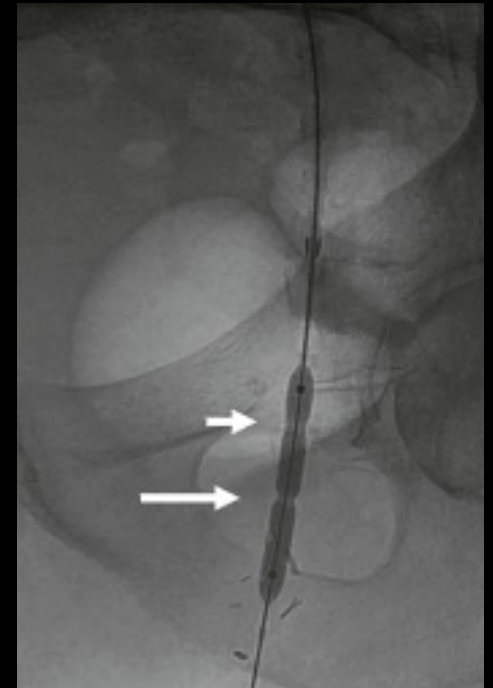
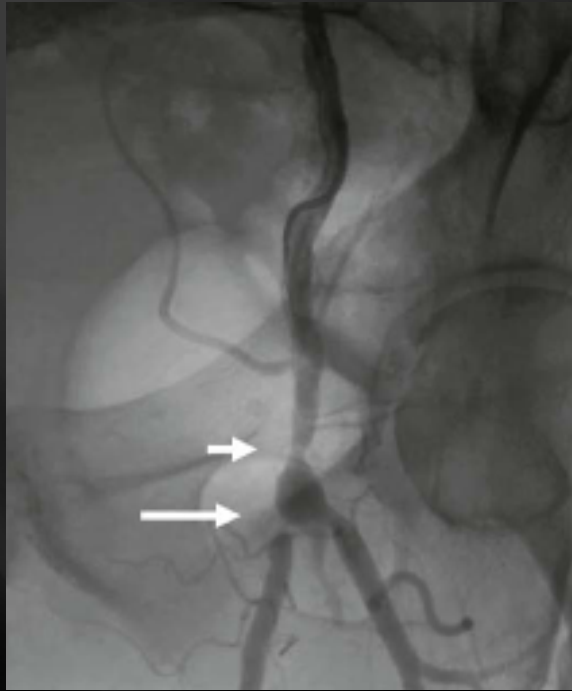
# ANGIOGRAPHY



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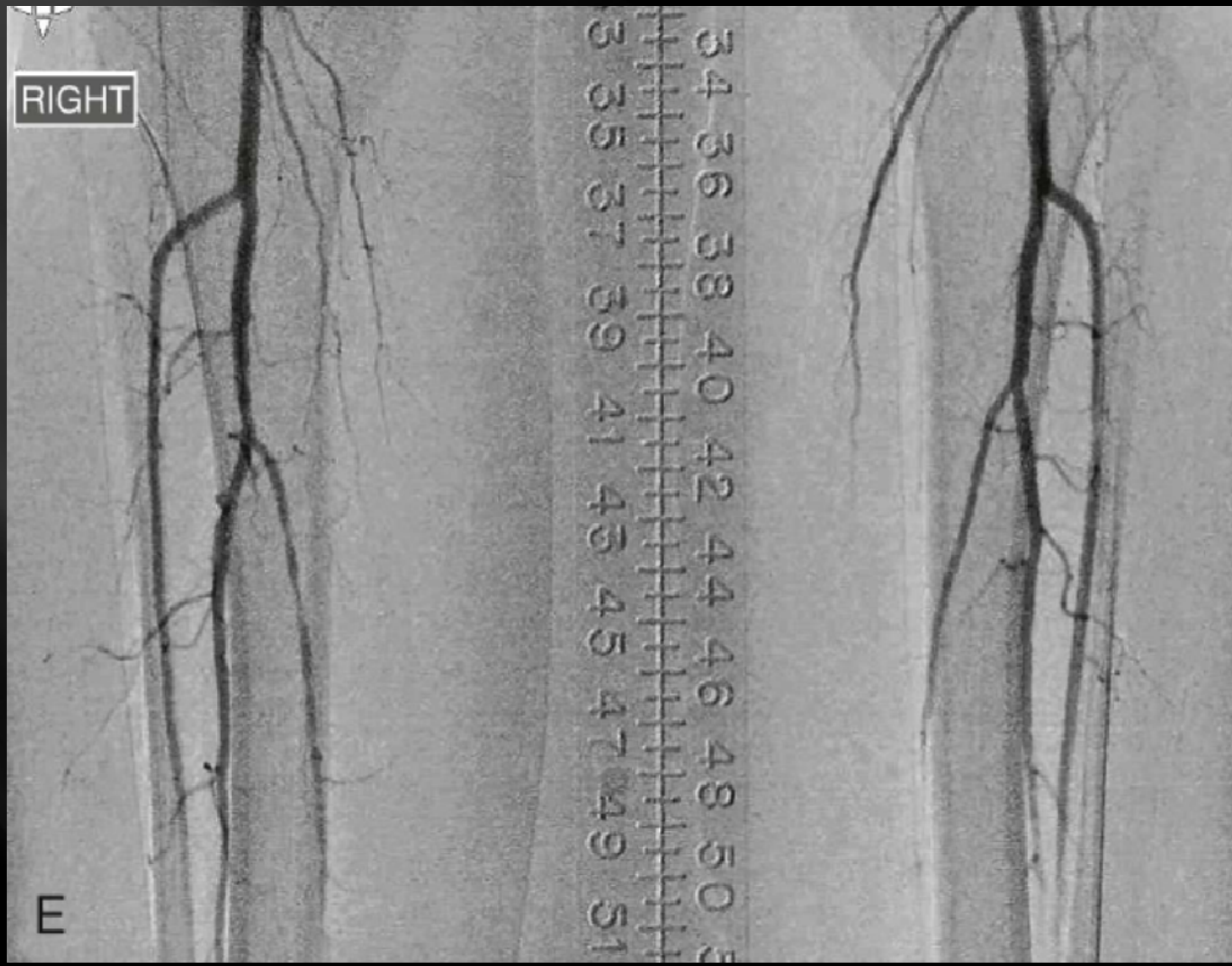
# ANGIOGRAPHY



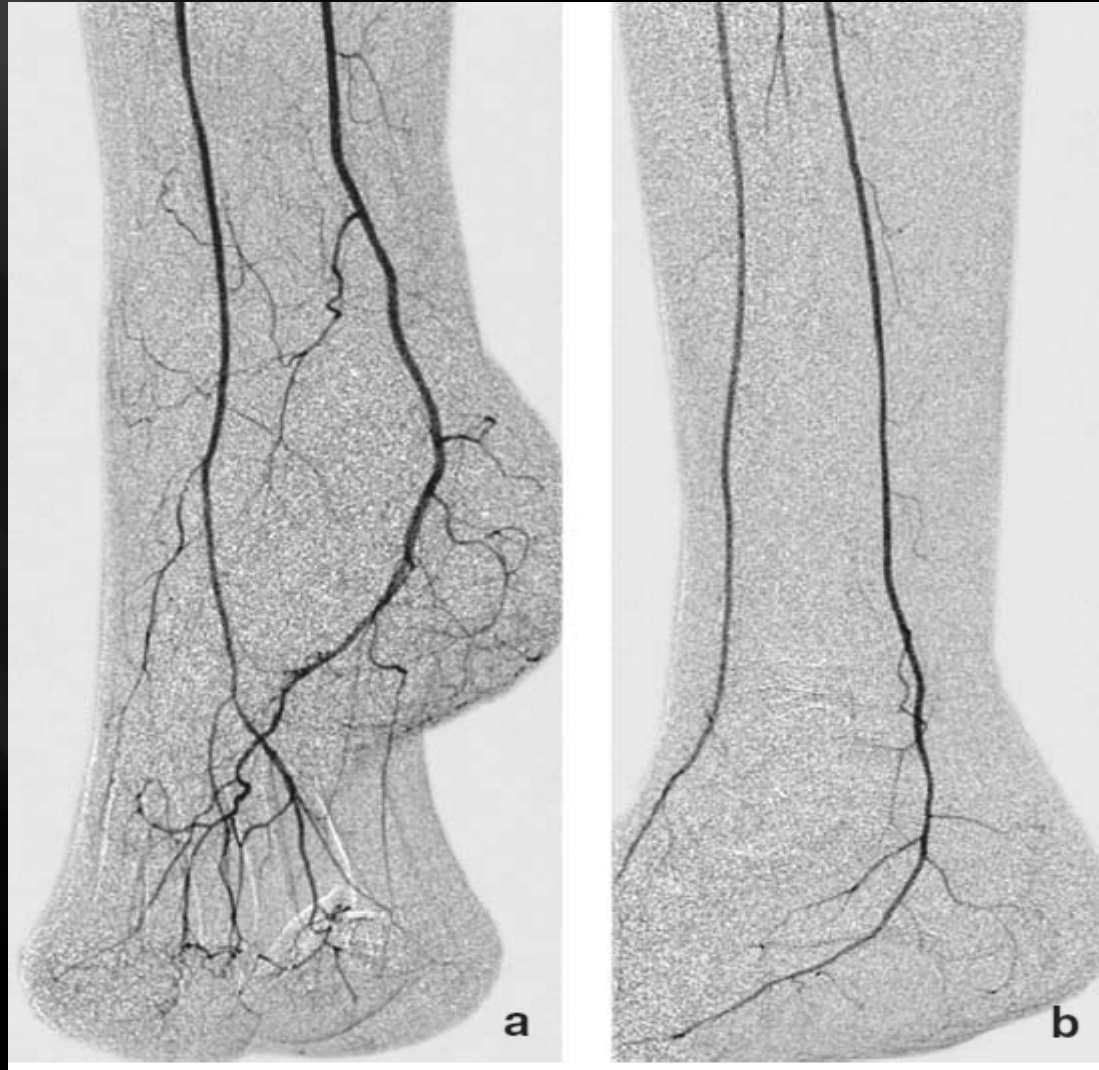
# ANGIOGRAPHY



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➤ Sensitive: ✓✓✓✓✓

➤ Operator dependent: ✗

➤ Toxic: ✓✓✓

➤ Therapeutic: ✓✓✓

THANK YOU