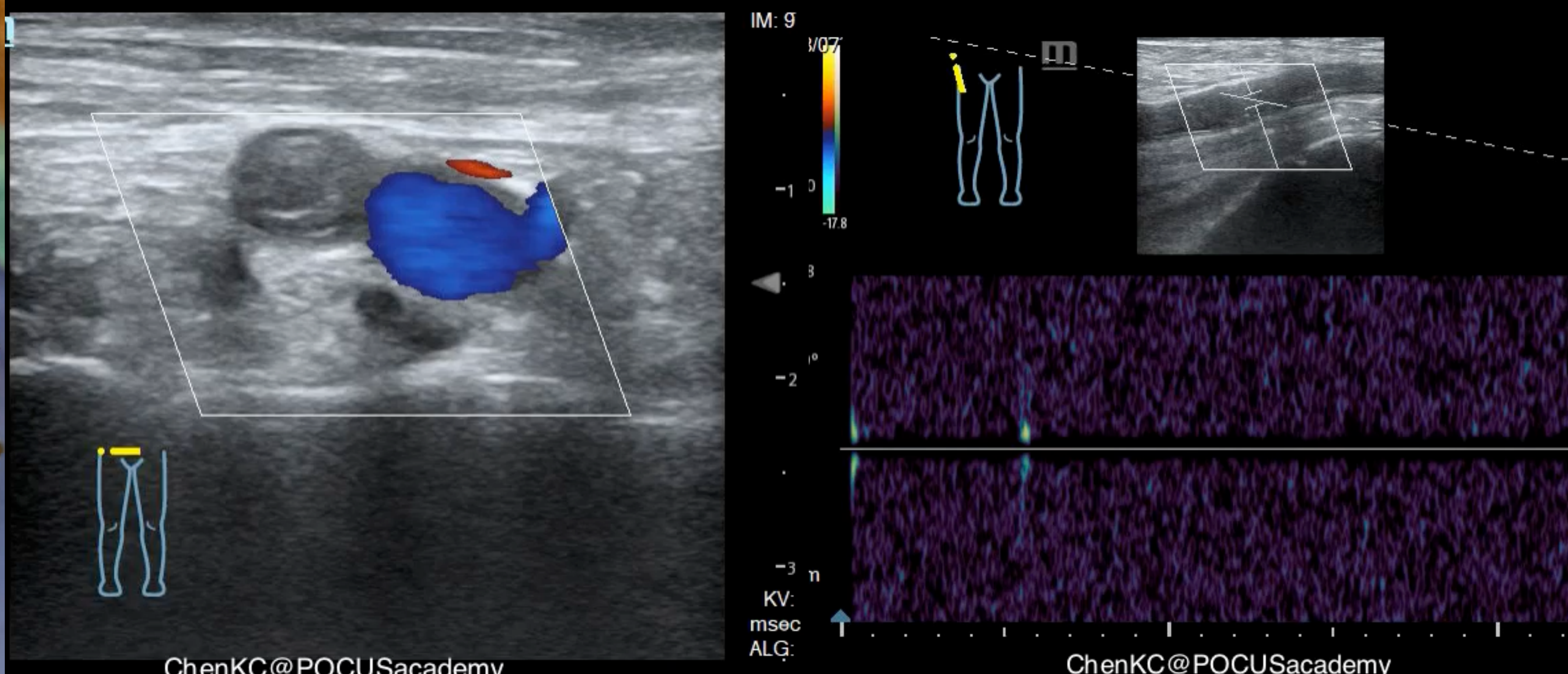




PAOD

Peripheral Arterial Occlusive Disease

陳國智醫師 雙和醫院急診醫學科

juice119@gmail.com / POCUSAcademy.com

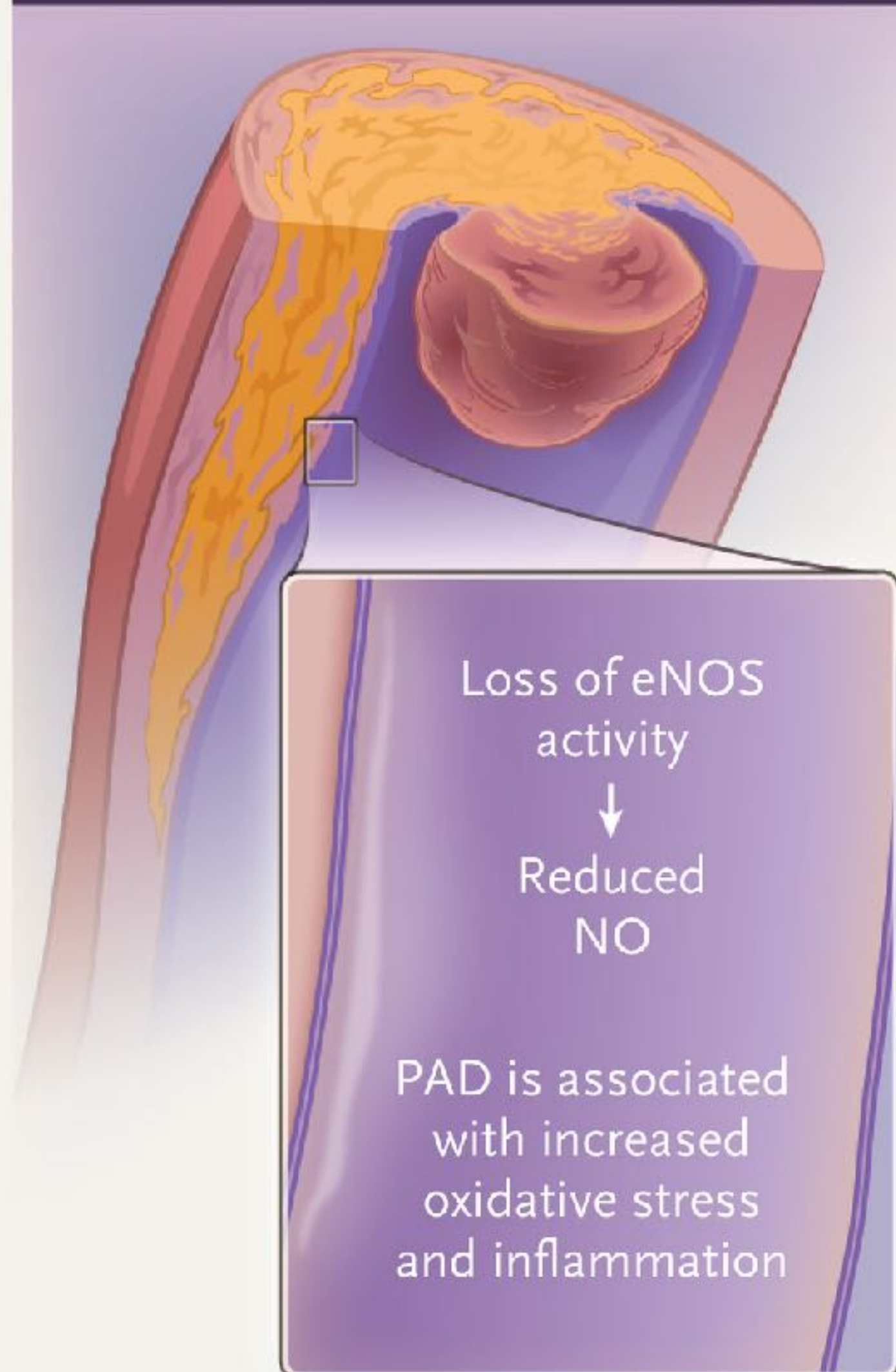
先進與革新急症技術中心 / Advanced & Revolutionary Technology center

Peripheral Artery Disease in the Legs

Mary M. McDermott, M.D.^{1,2}

NEJM 2026 Clinical practice

A Pathophysiological Findings

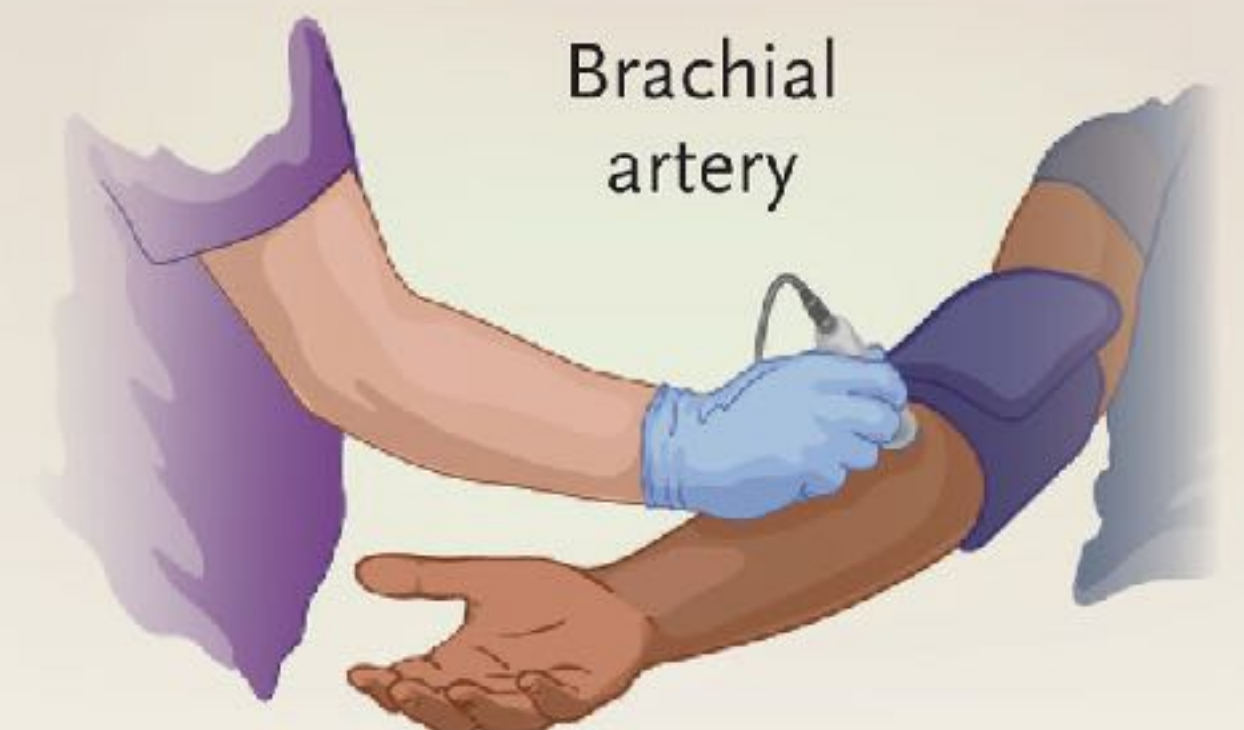
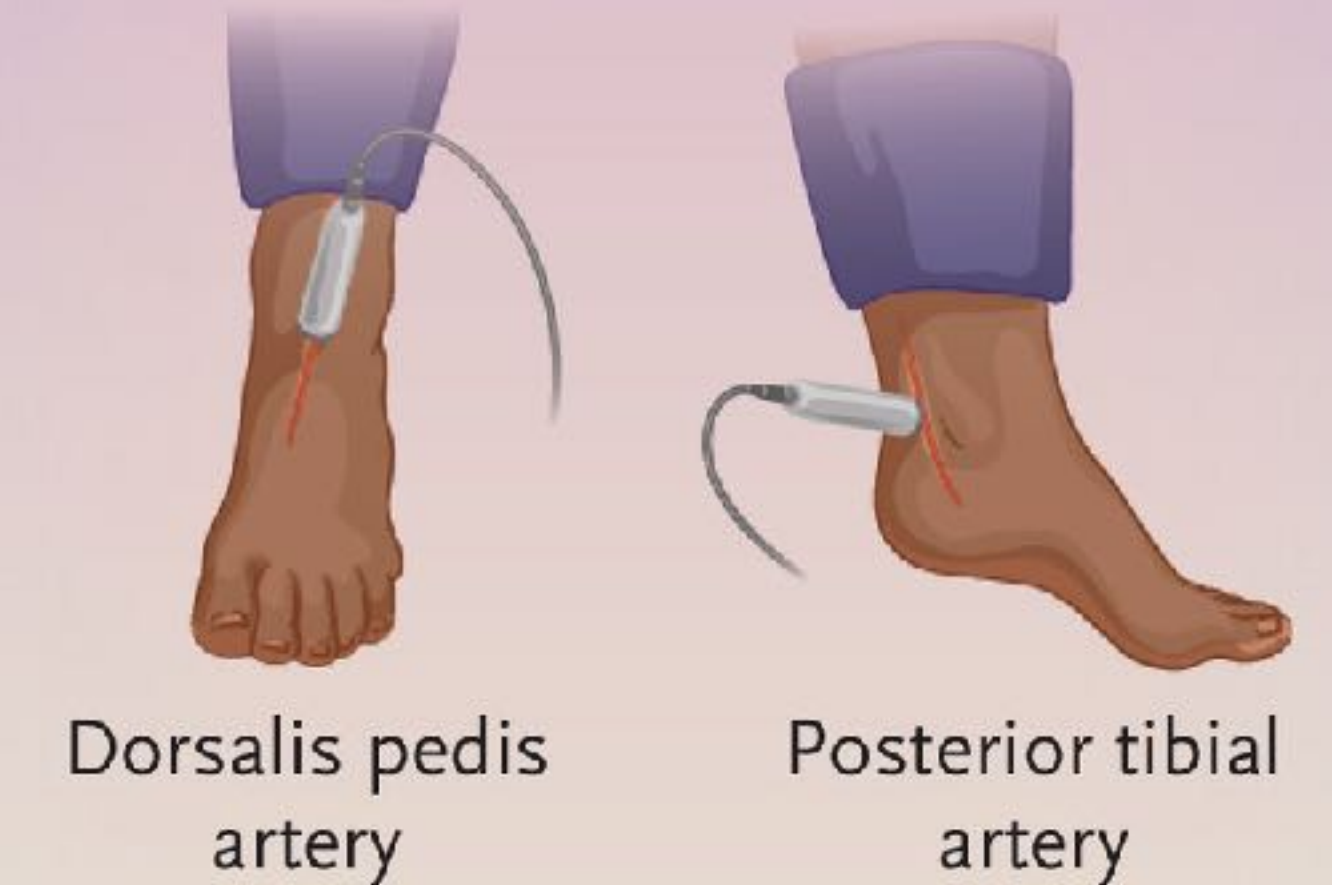


B Leg Symptoms



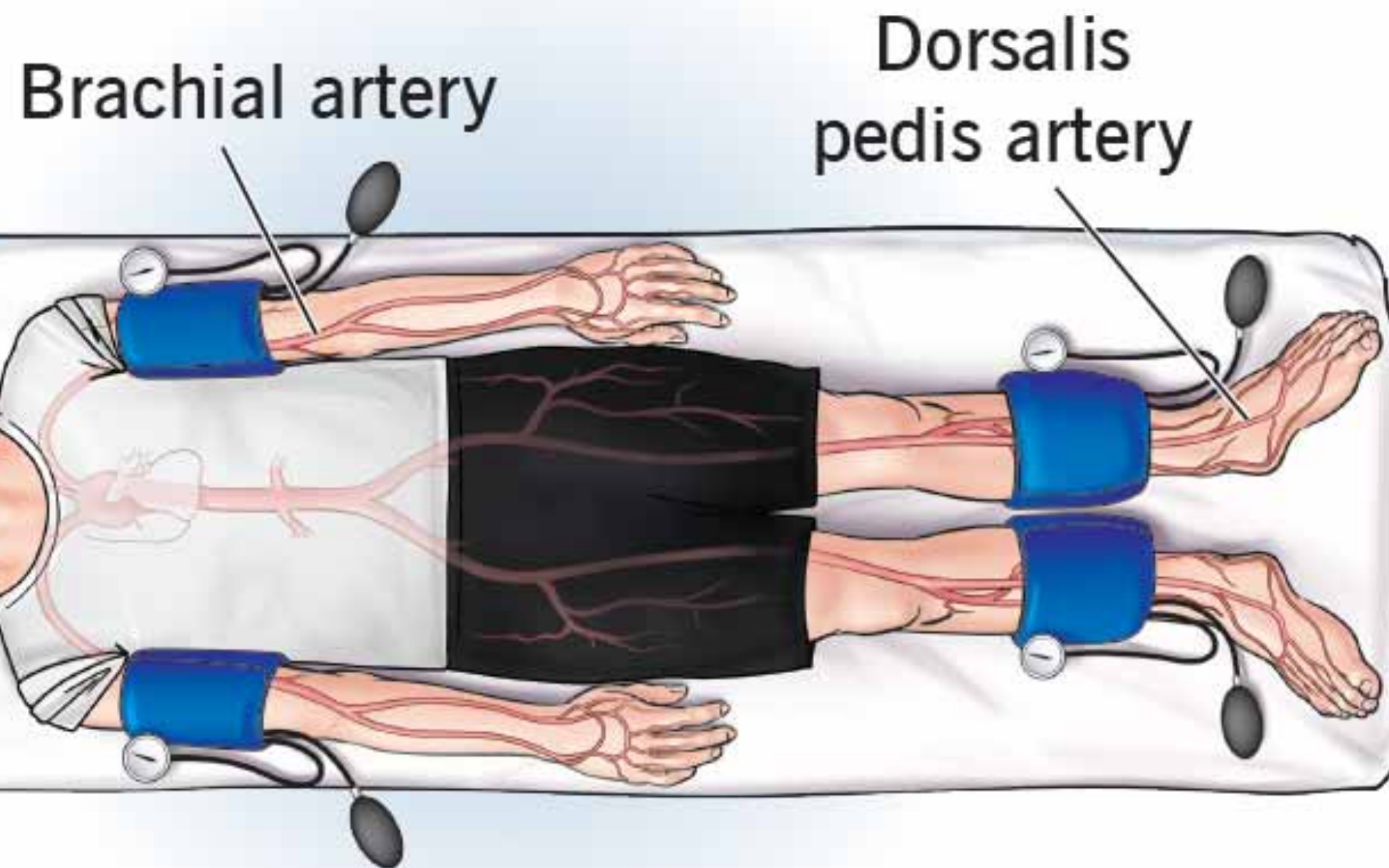
C Diagnosis with ABI

$$\text{ABI} = \frac{\text{Mean systolic pressure in the ankle}}{\text{Mean systolic pressure in the arm}}$$



Ankle-brachial index (ABI)

$$\frac{\text{Ankle blood pressure}}{\text{Arm blood pressure}} = \text{ABI}$$



1.0-1.3 is normal

0.9 or lower, you have PAD

Normal 1.0 ~ 1.3

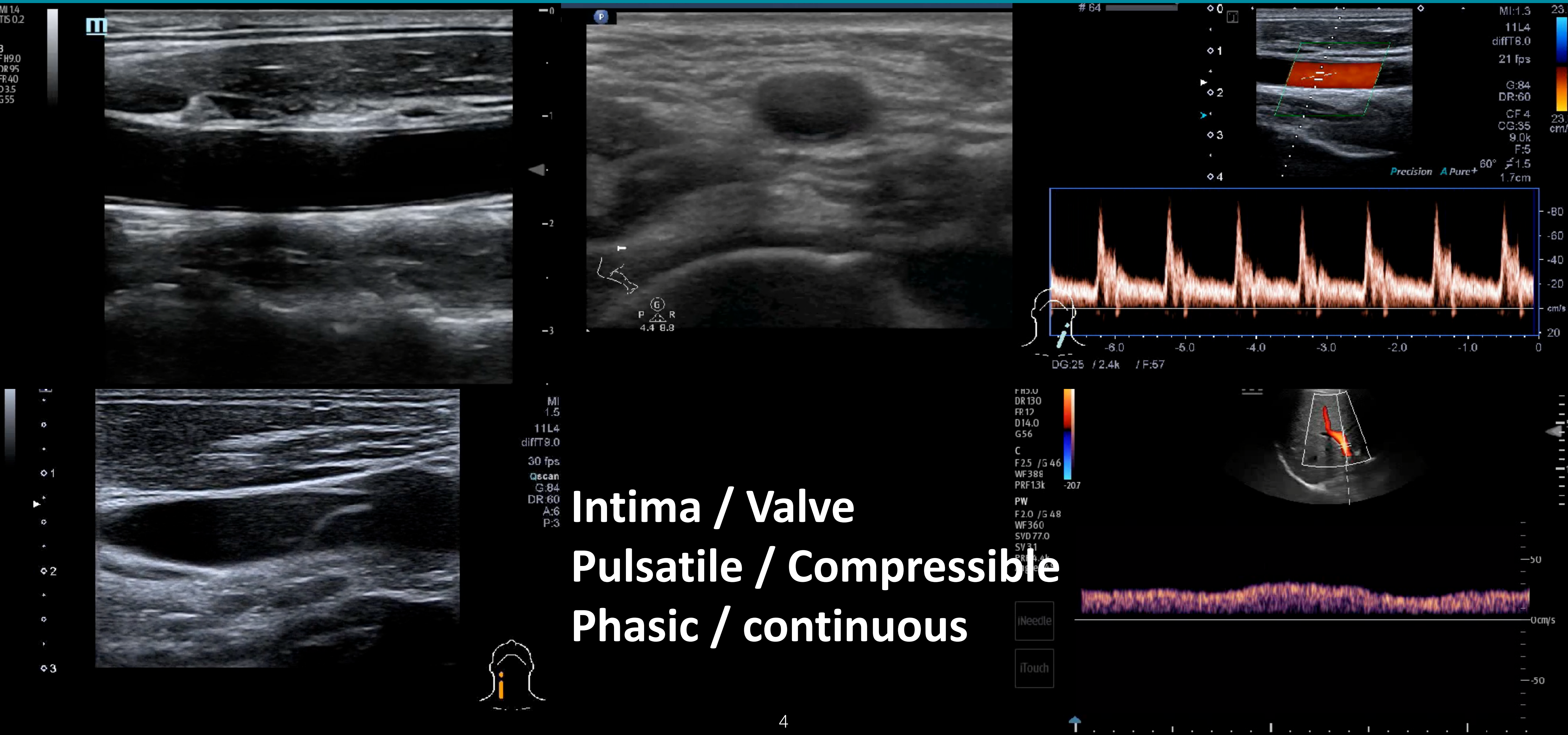
Borderline 0.9 ~ 1.0

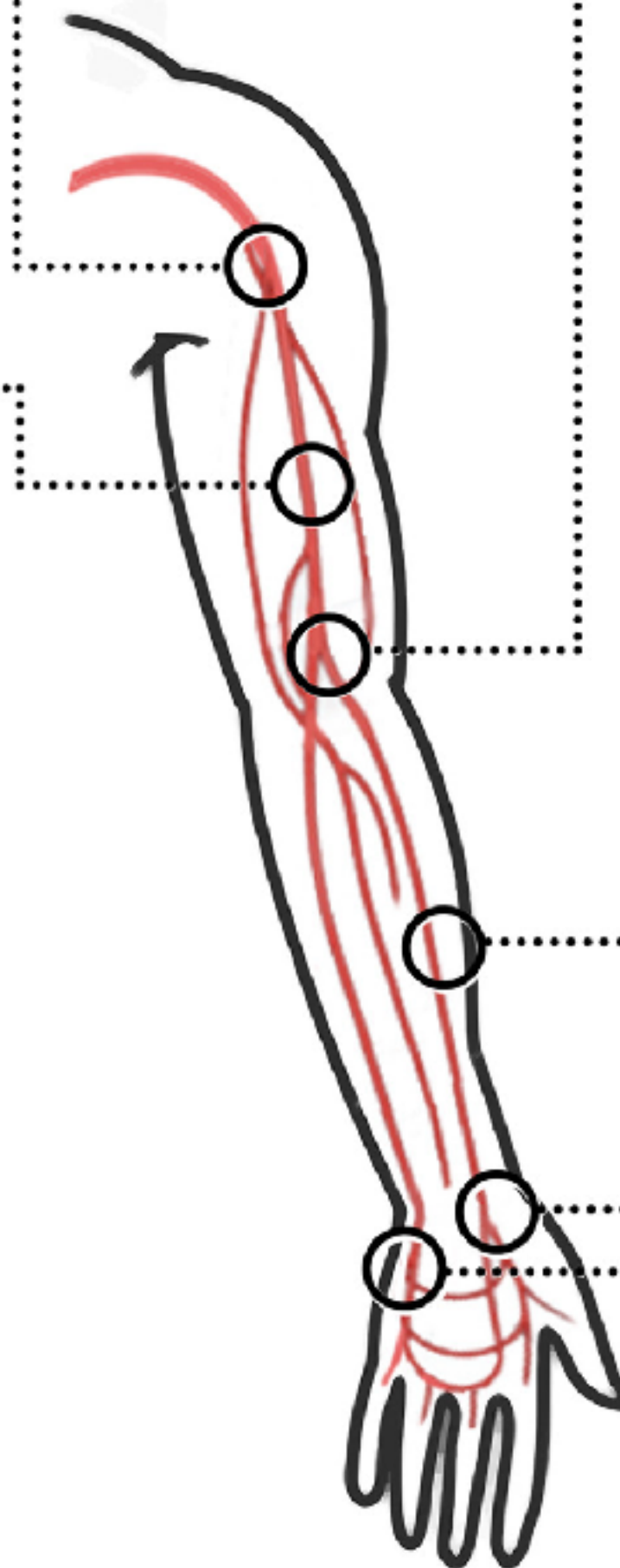
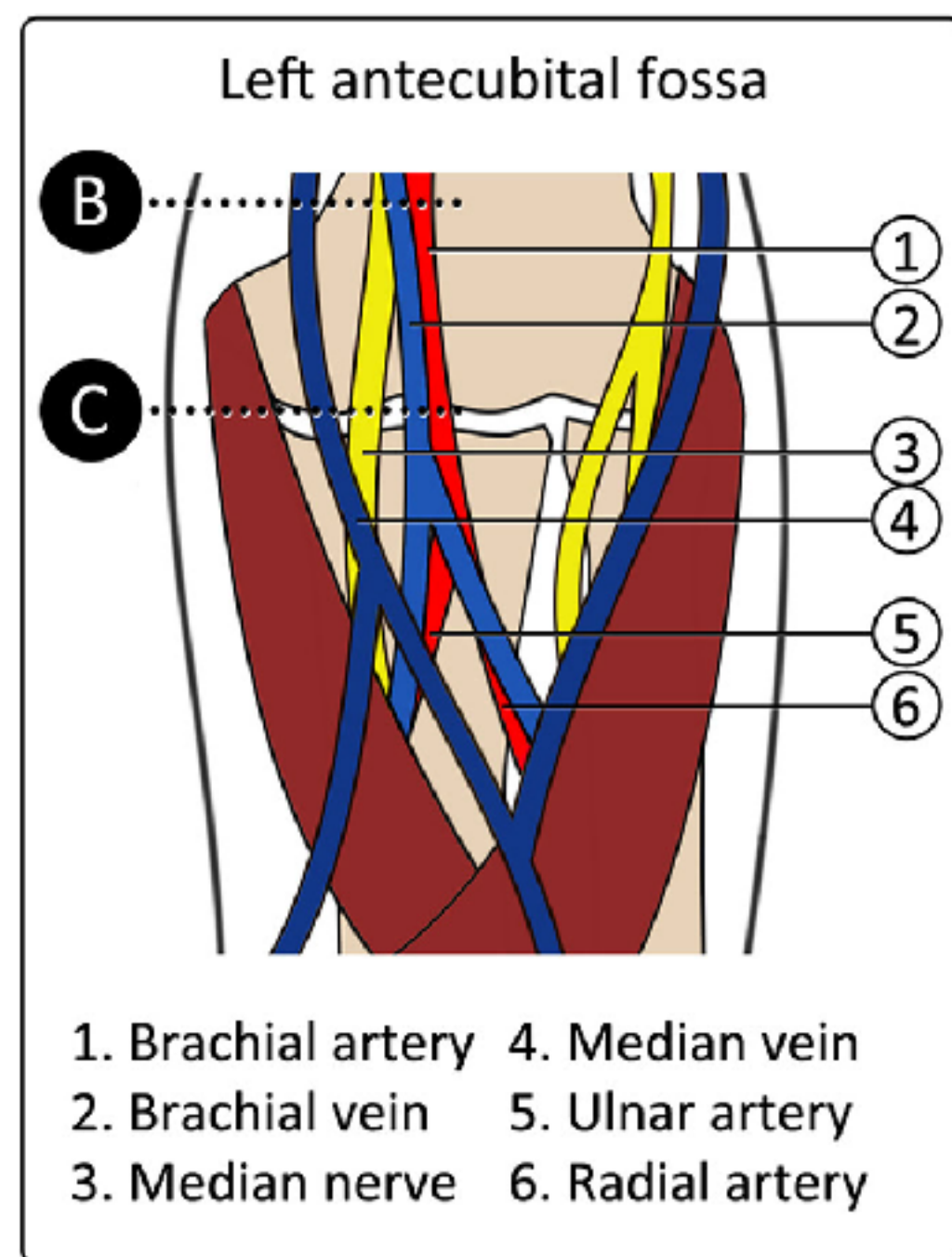
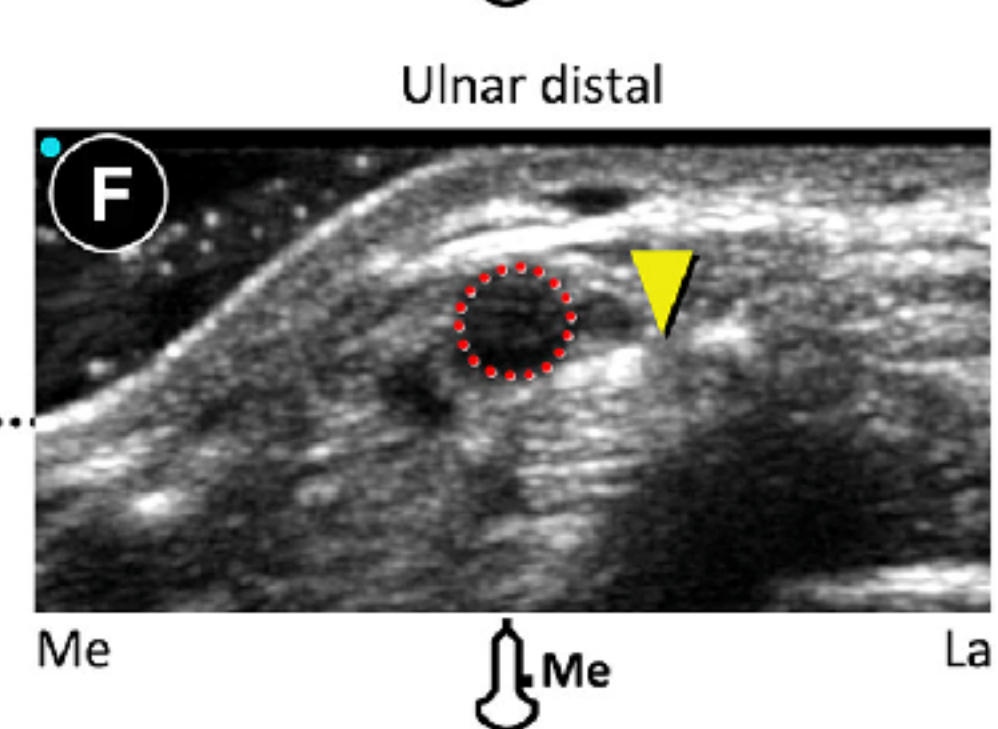
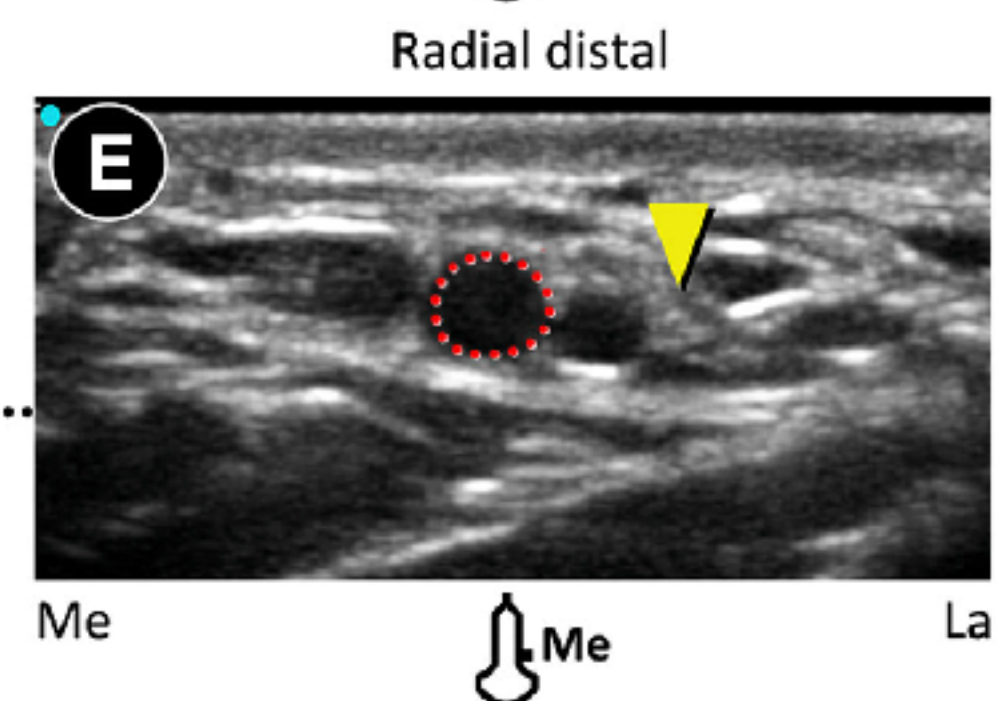
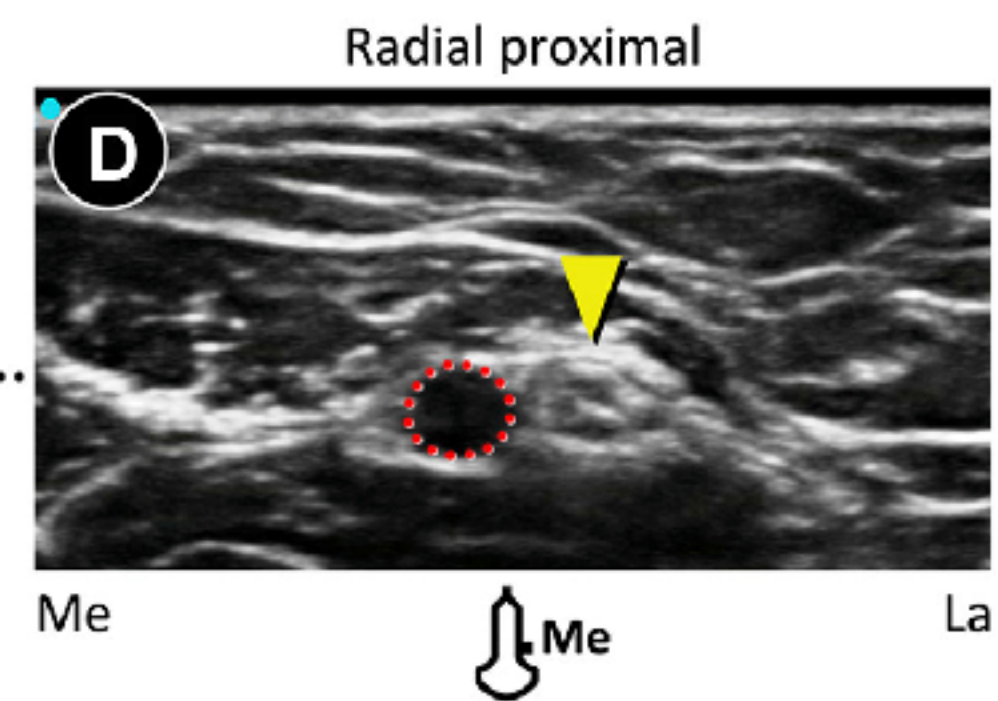
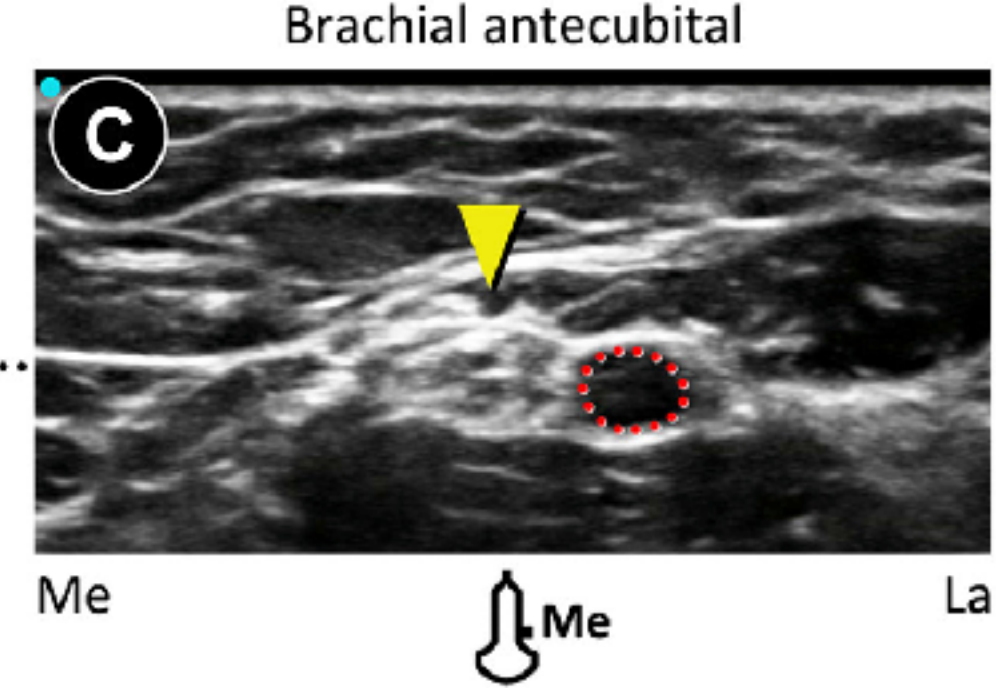
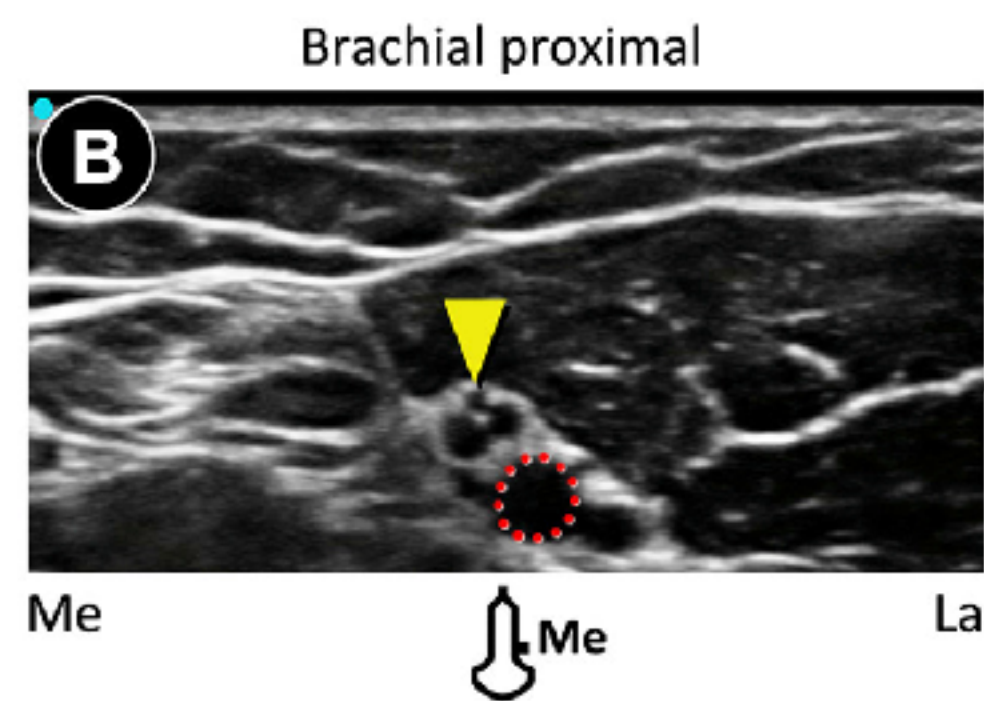
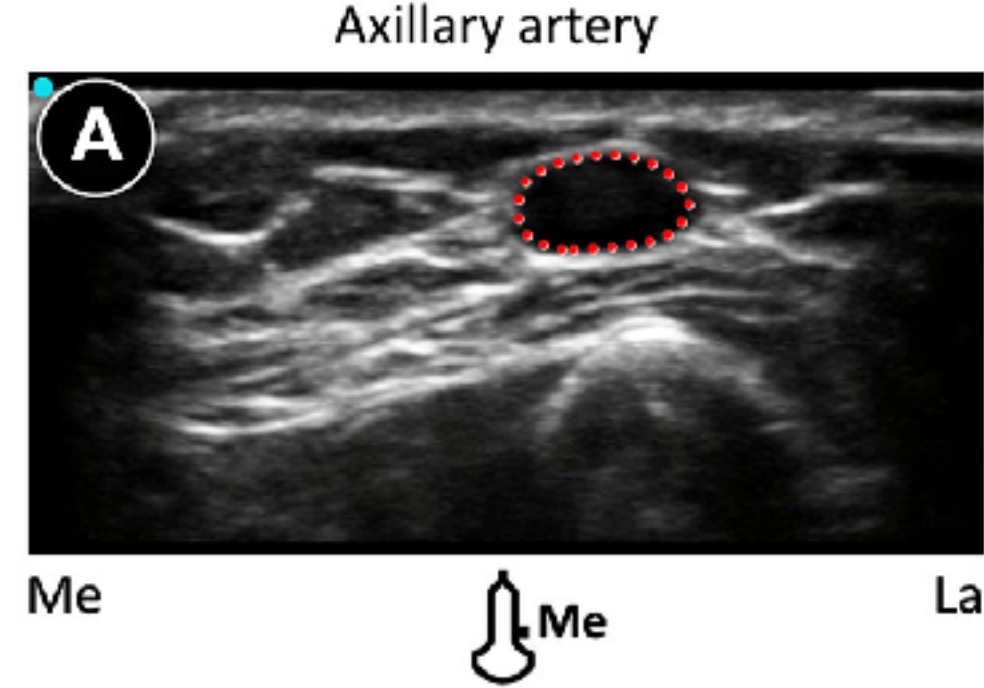
Mild PAOD 0.7 ~ 0.9

Moderate PAOD 0.4 ~ 0.7

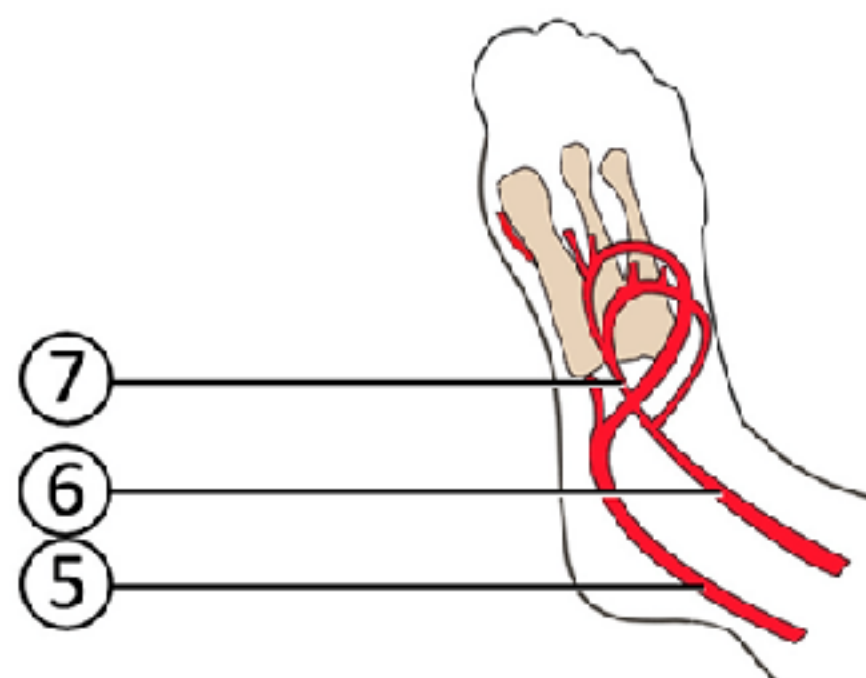
Severe PAOD < 0.4

ARTERY / VEIN

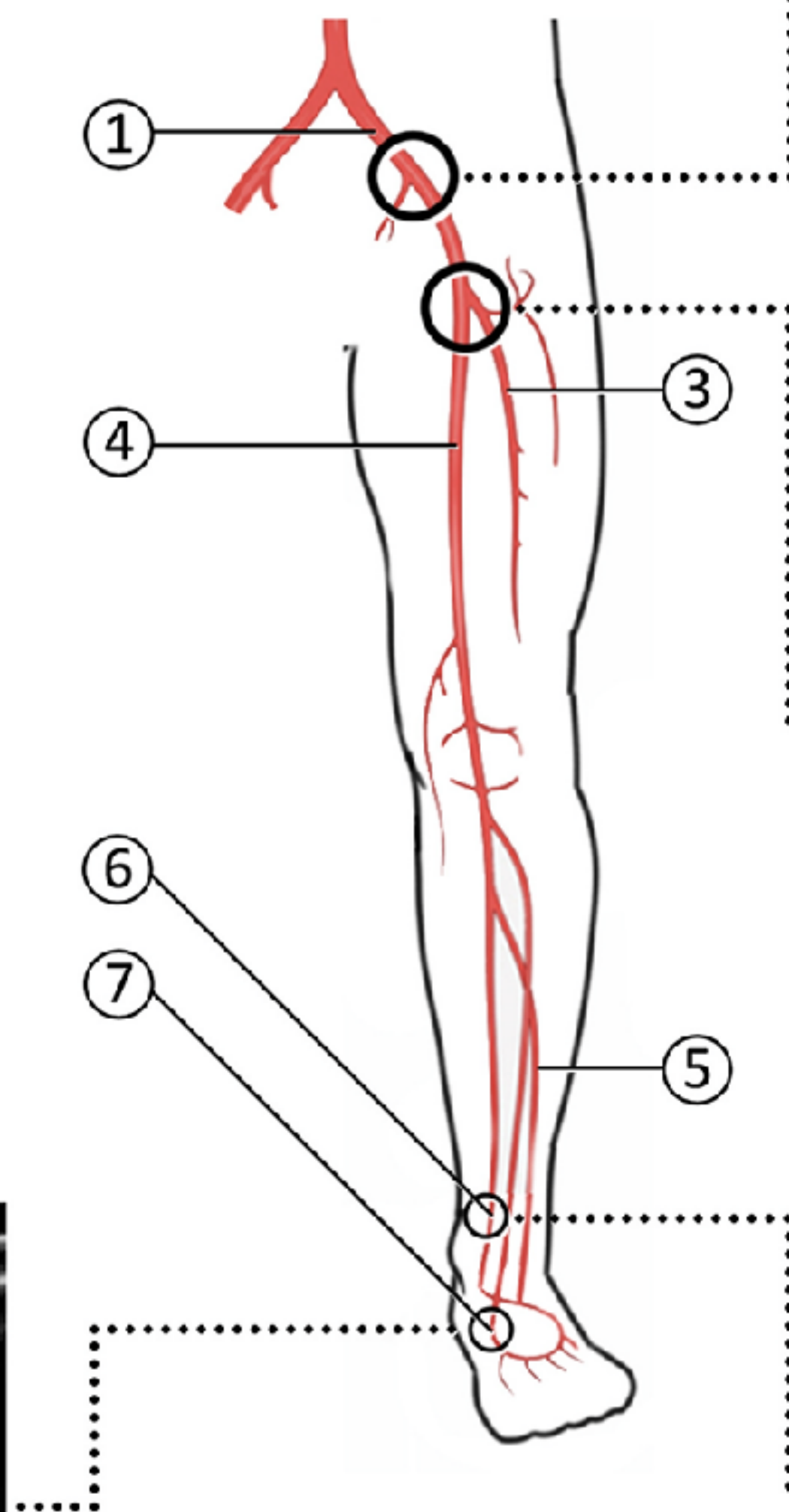




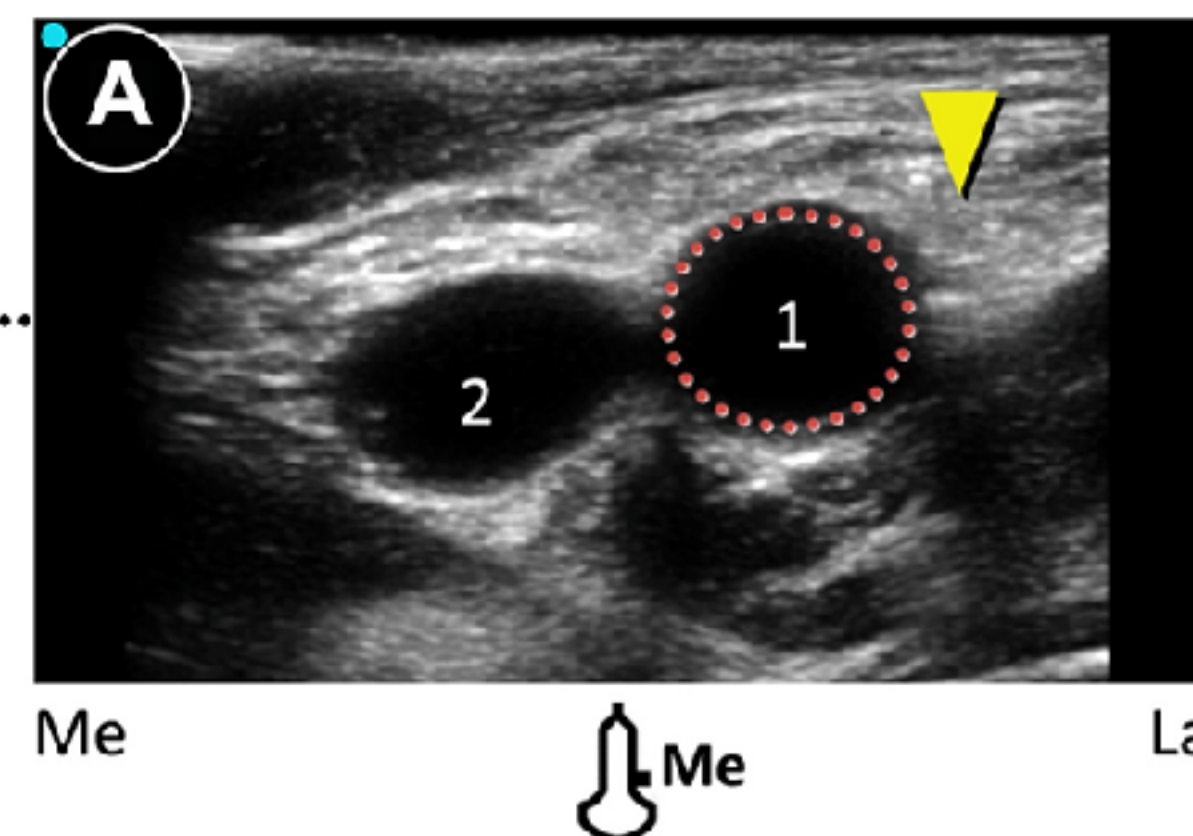
1. Common femoral artery
2. Common femoral vein
3. Superficial femoral artery
4. Deep femoral artery
5. Anterior tibial artery
6. Posterior tibial artery
7. Dorsalis pedis artery



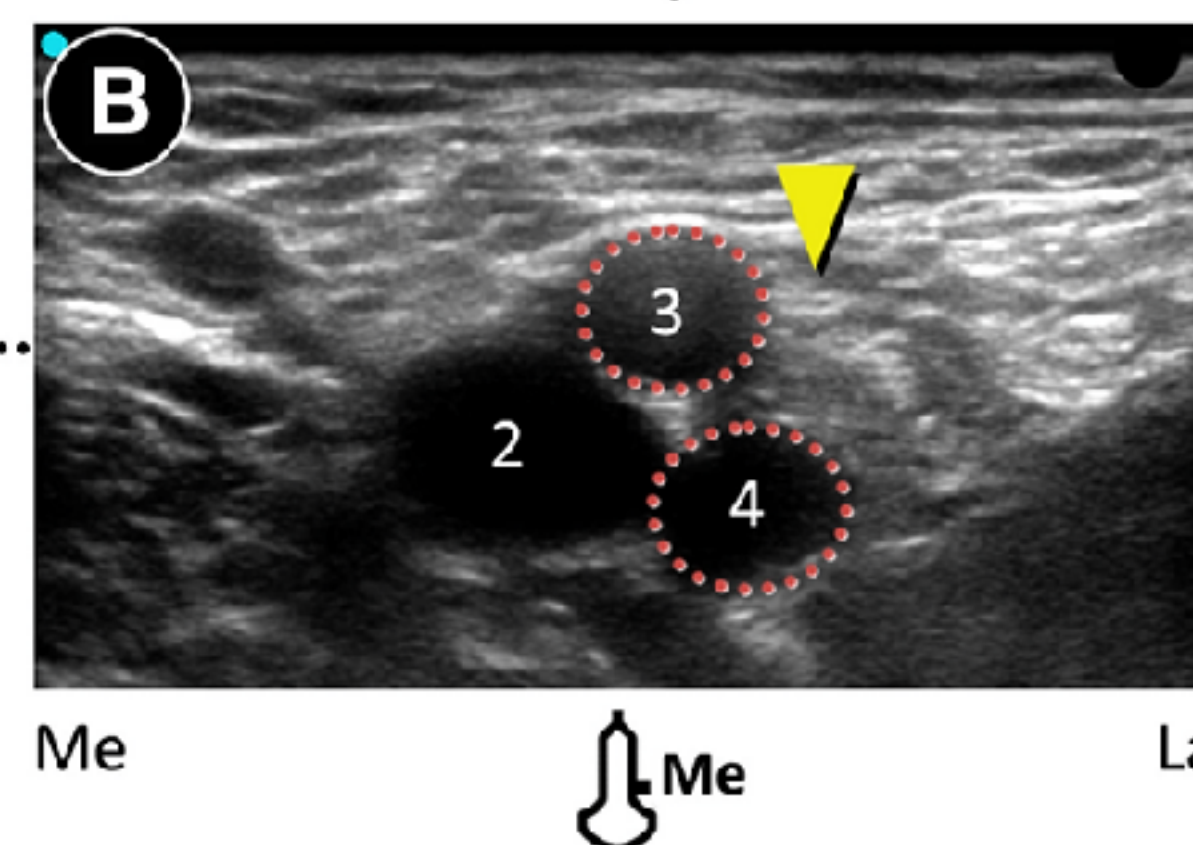
Dorsal pedis artery



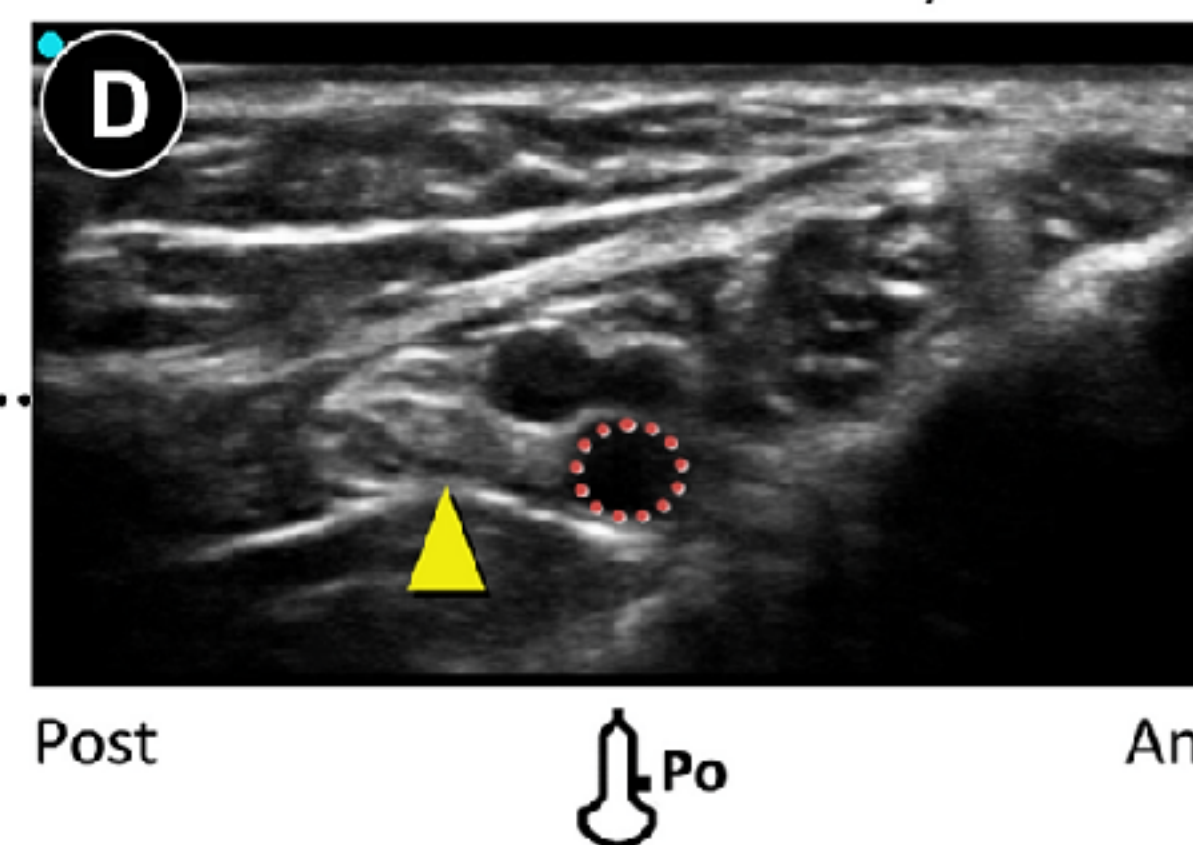
Common femoral artery

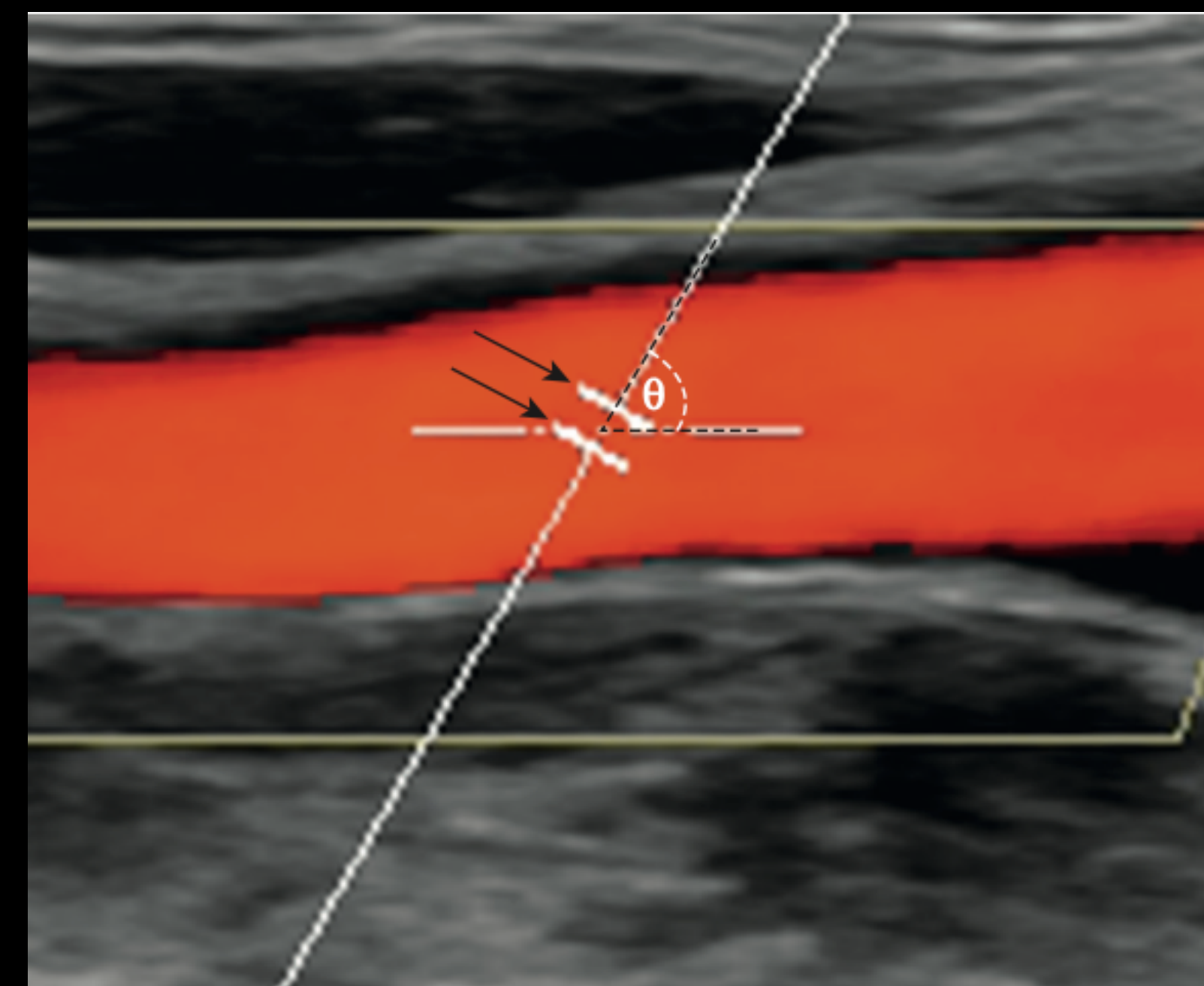
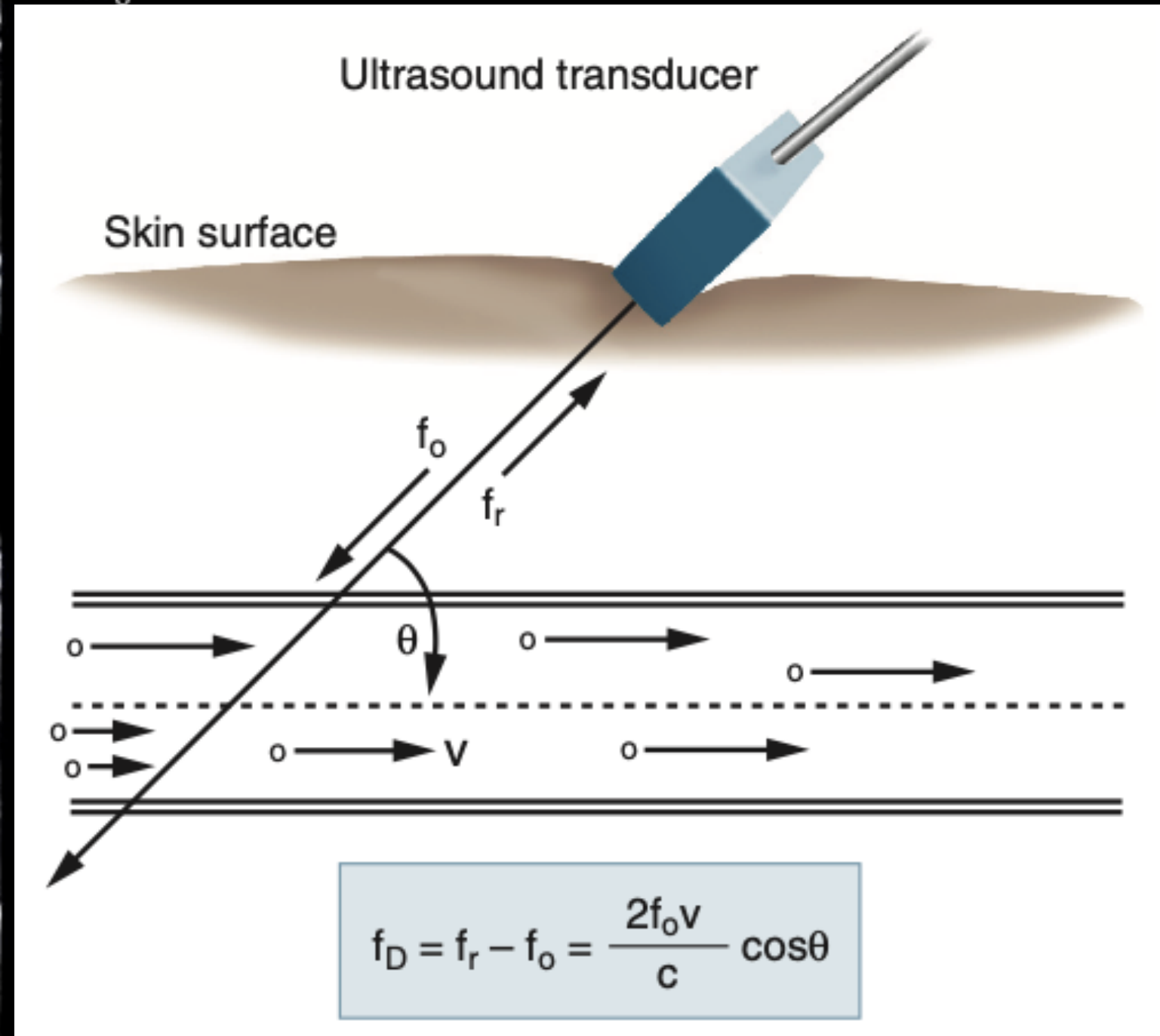


Femoral artery bifurcation



Posterior tibial artery





13556011

Carotid

14:10:13

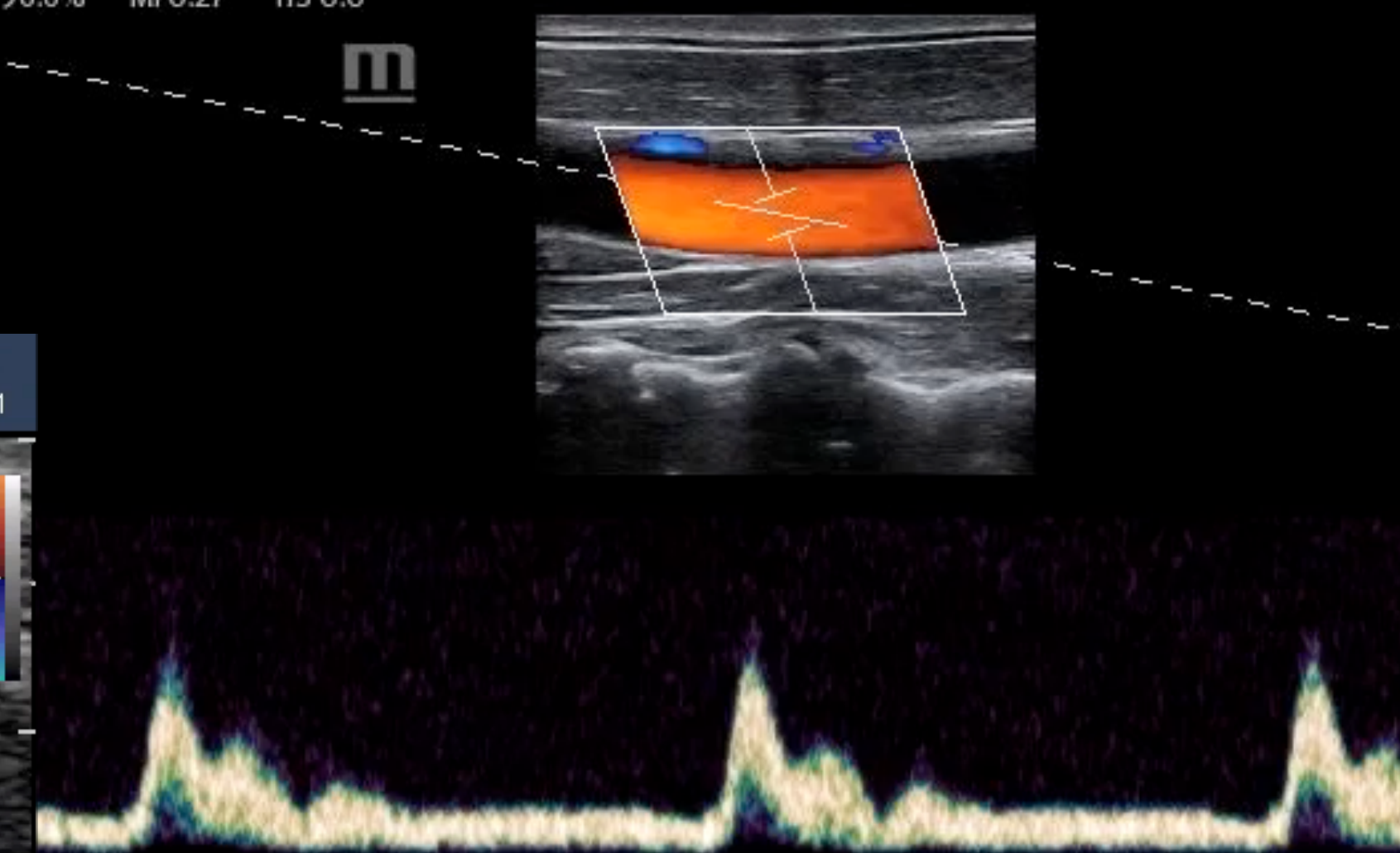
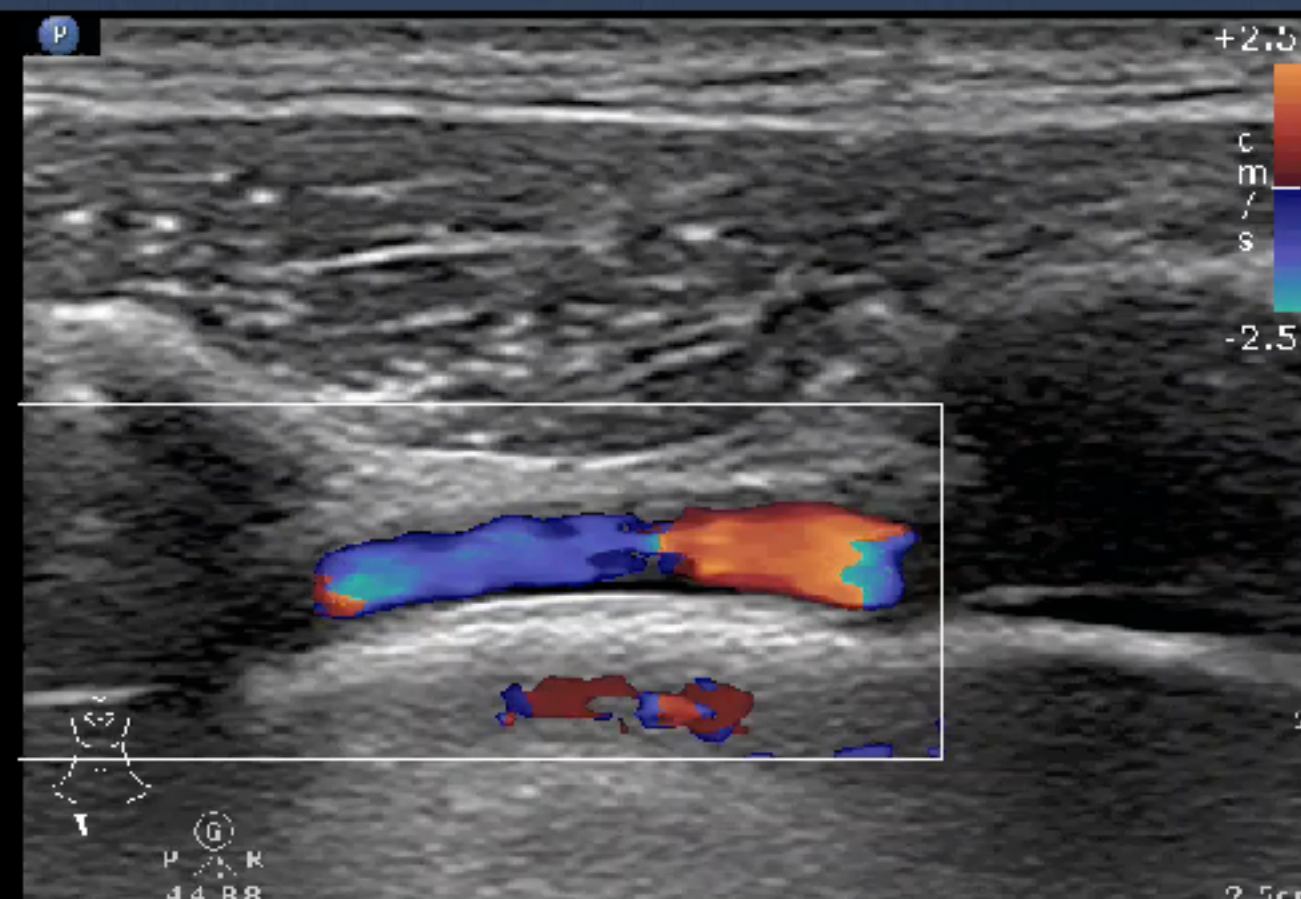
30 ~ 60°

PHILIPS TemporaryID 20160915152824 MI 1.1 9/15/2016
16-09-15-152024 SKII CR TIS 0.6 3:36:48 PM

Superficial
L12-3
1/ H/
2.5cm

2D
HGen
Gn 60
C 56
3/2/2

Color
6.7 MHz
Gn 41
1/3/4
Hfr Med

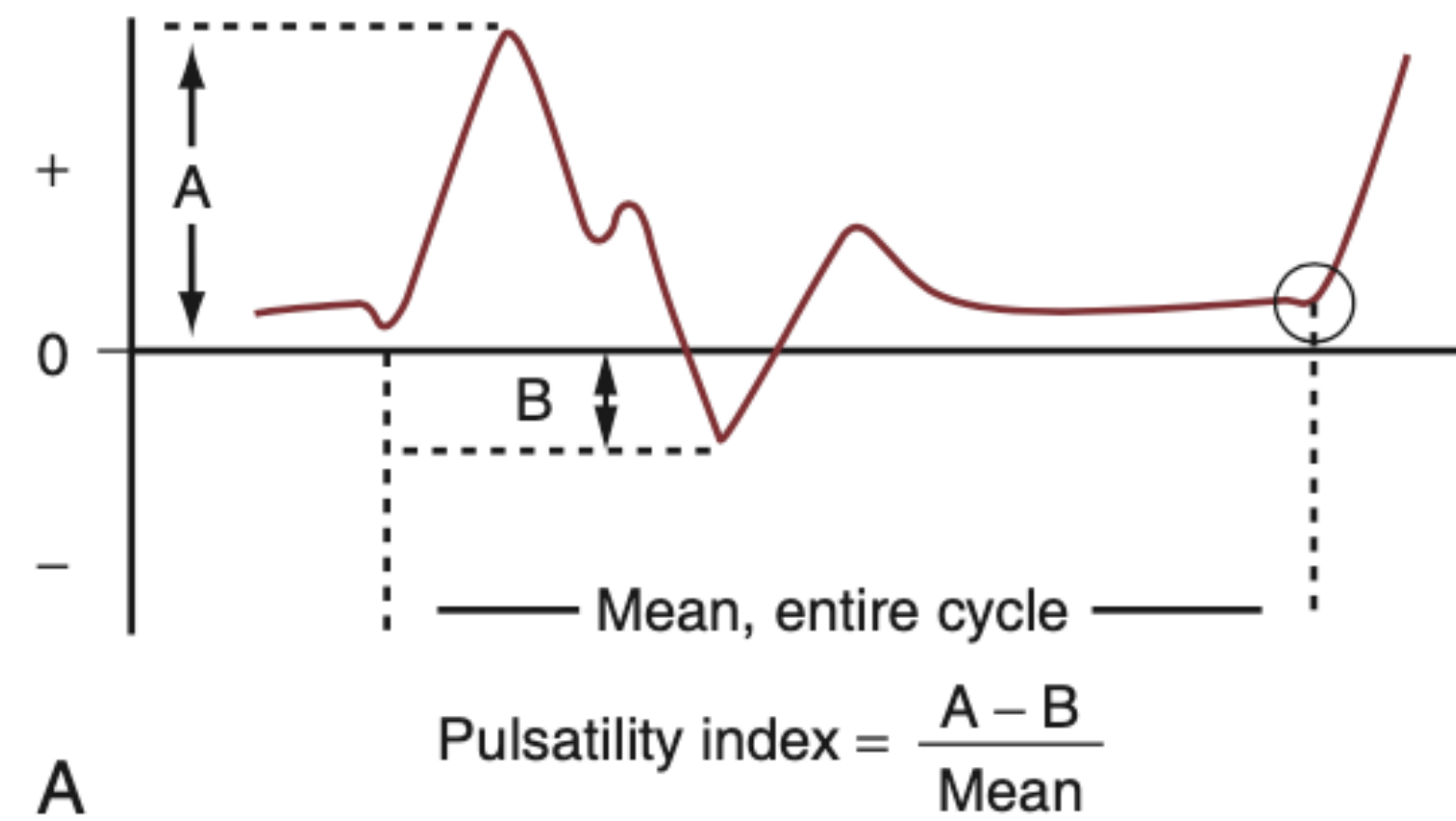


Pulsatility Measurement

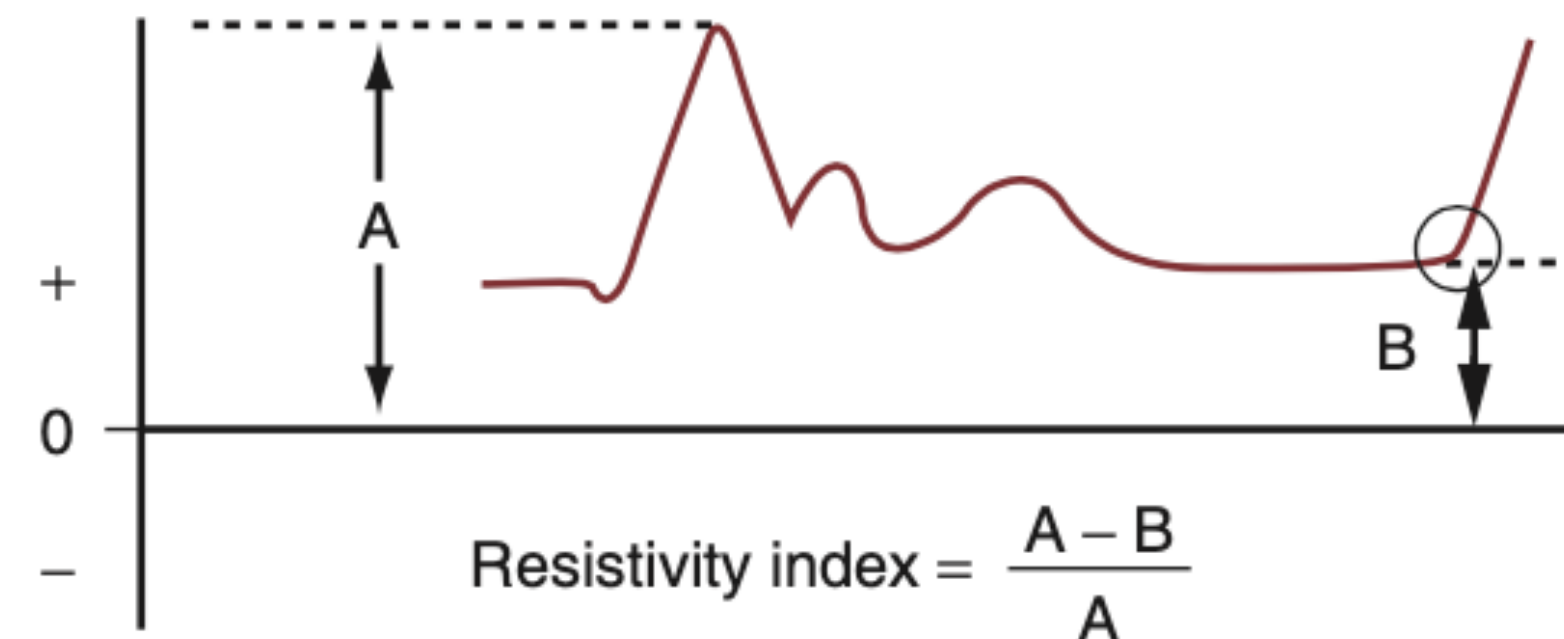
正常波形分析

生理狀態變異

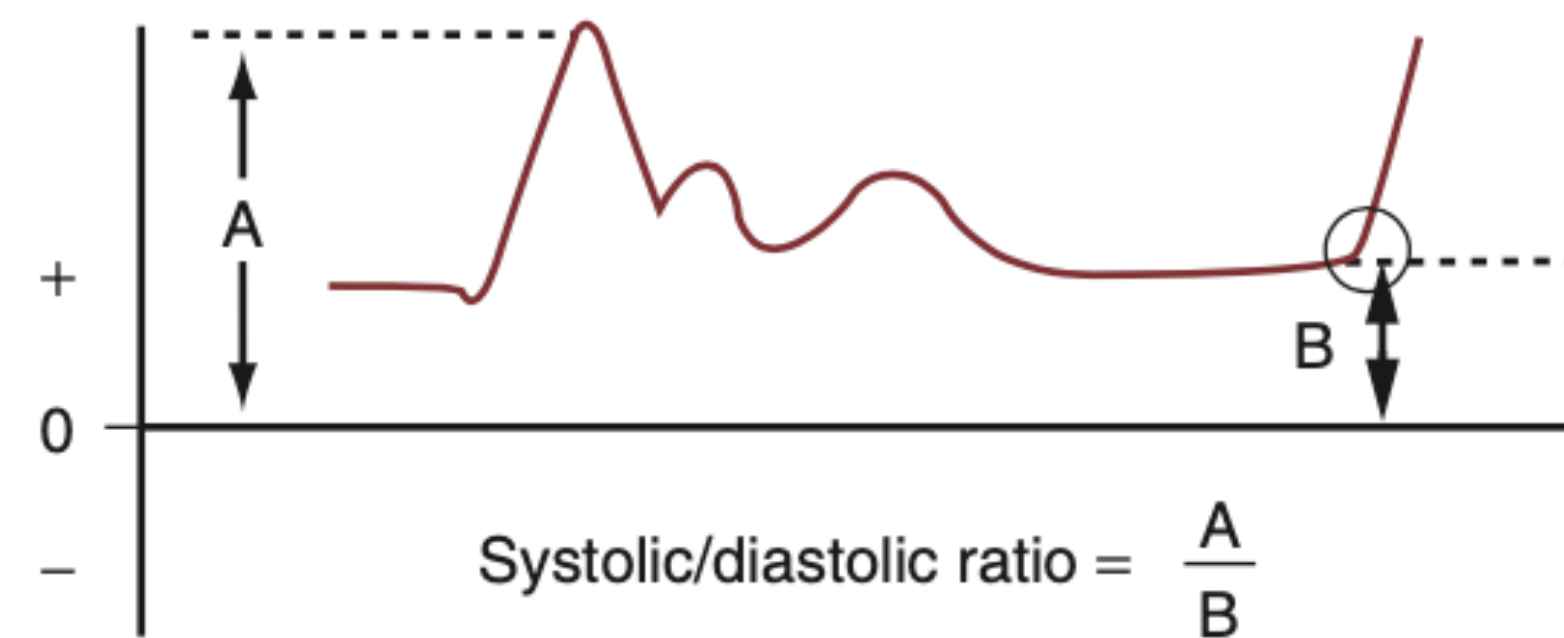
心臟功能影響



A

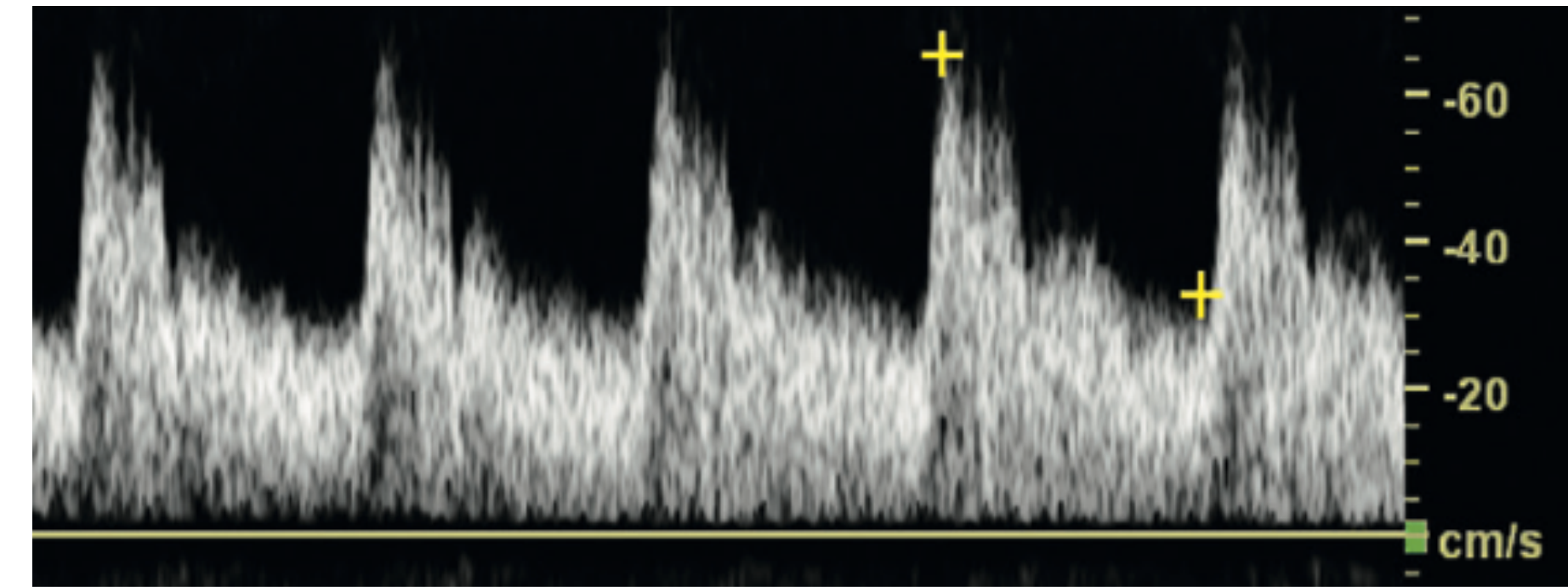


B



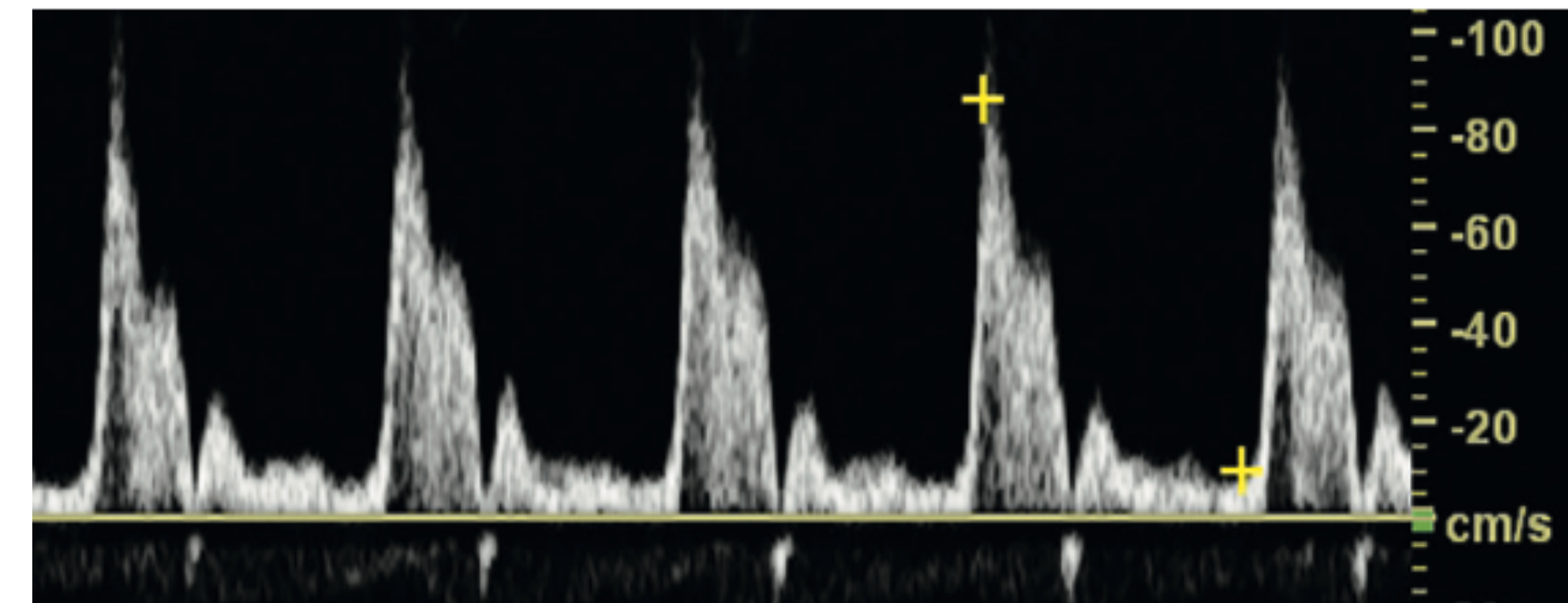
C

低



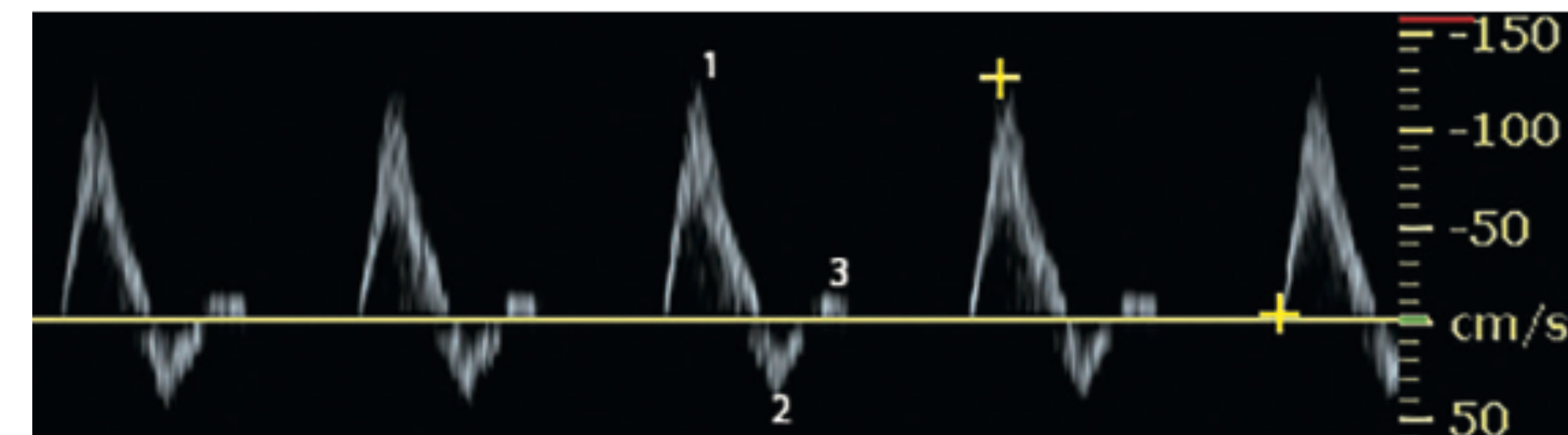
A

中



B

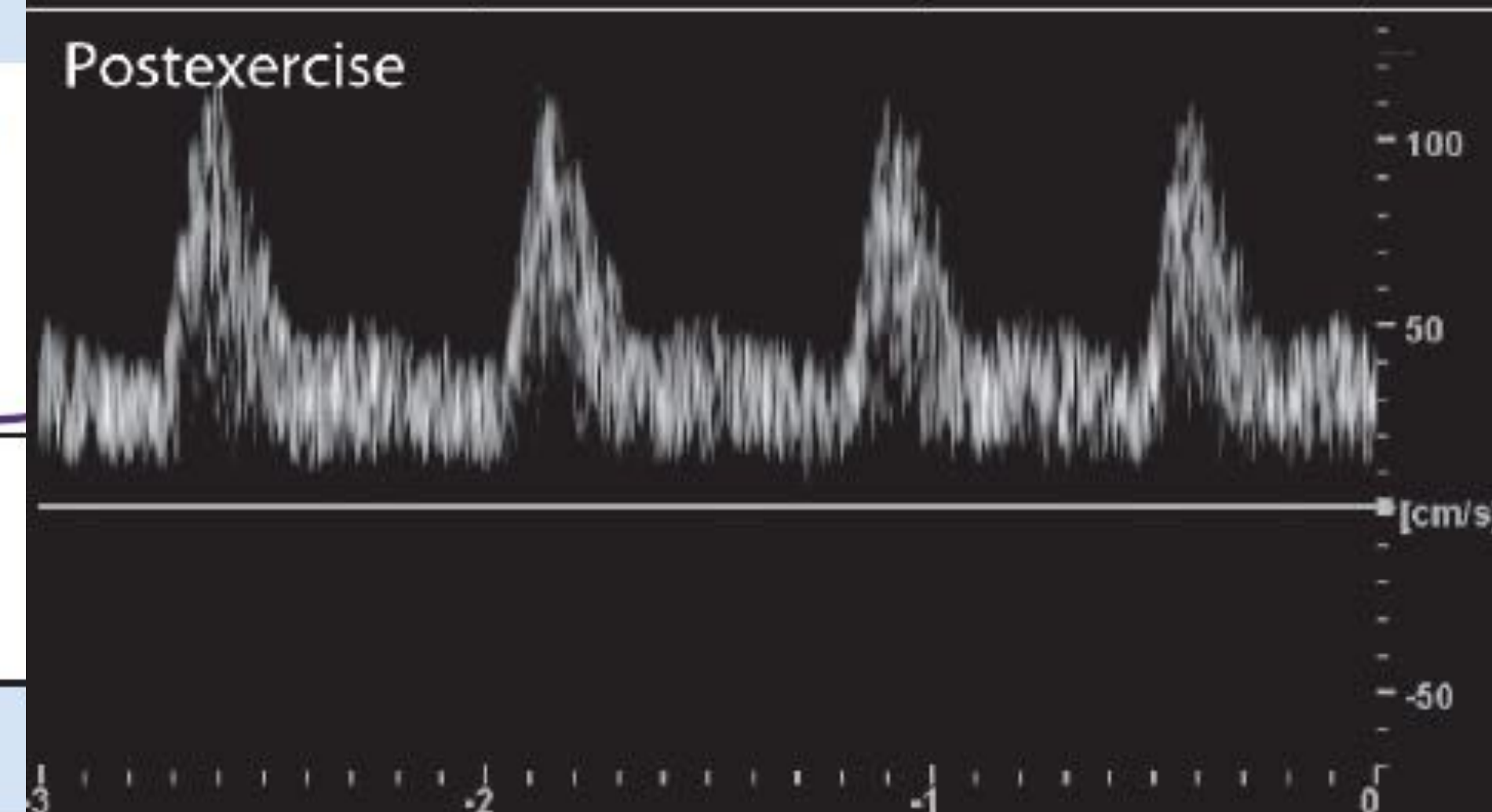
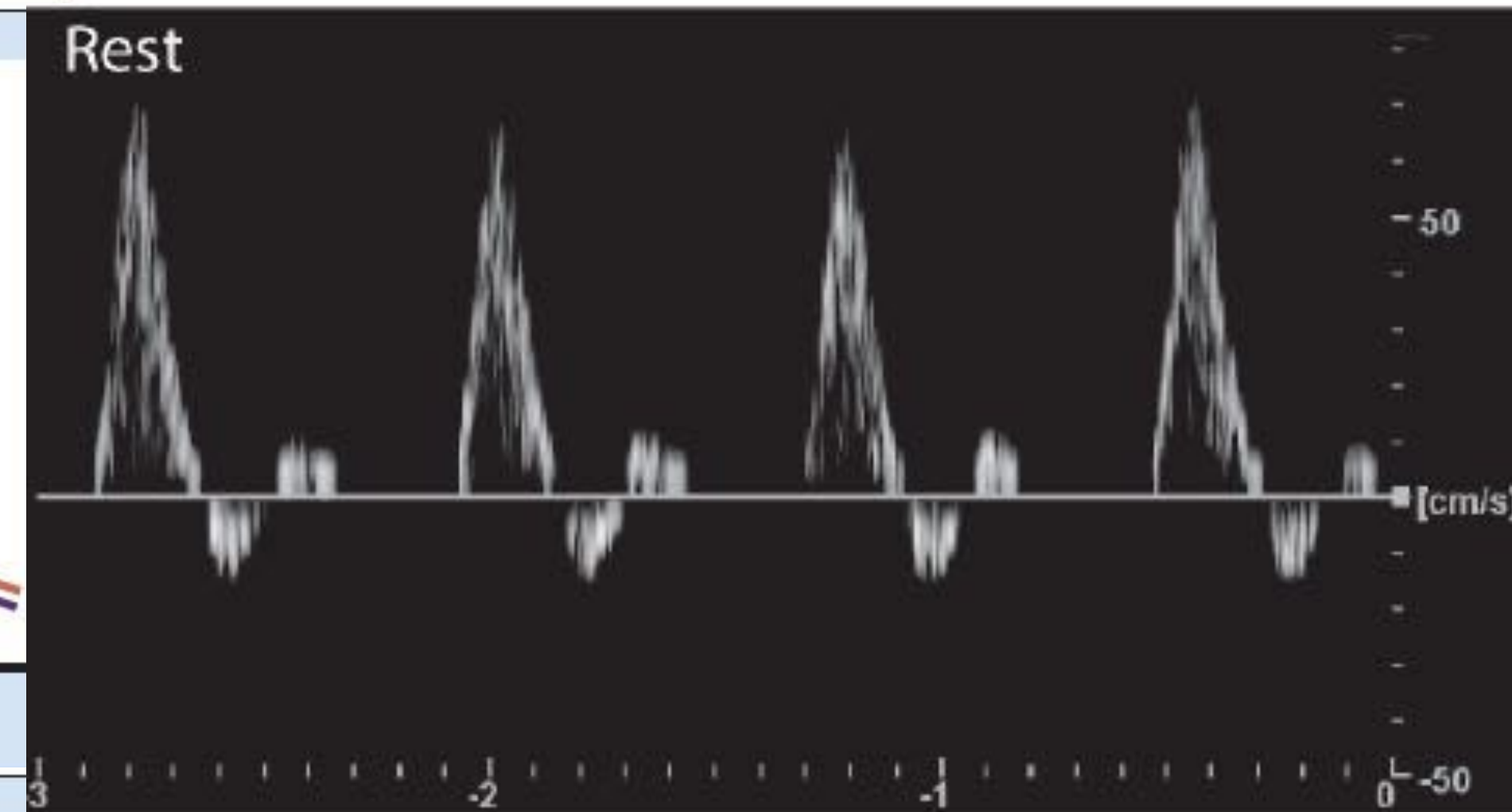
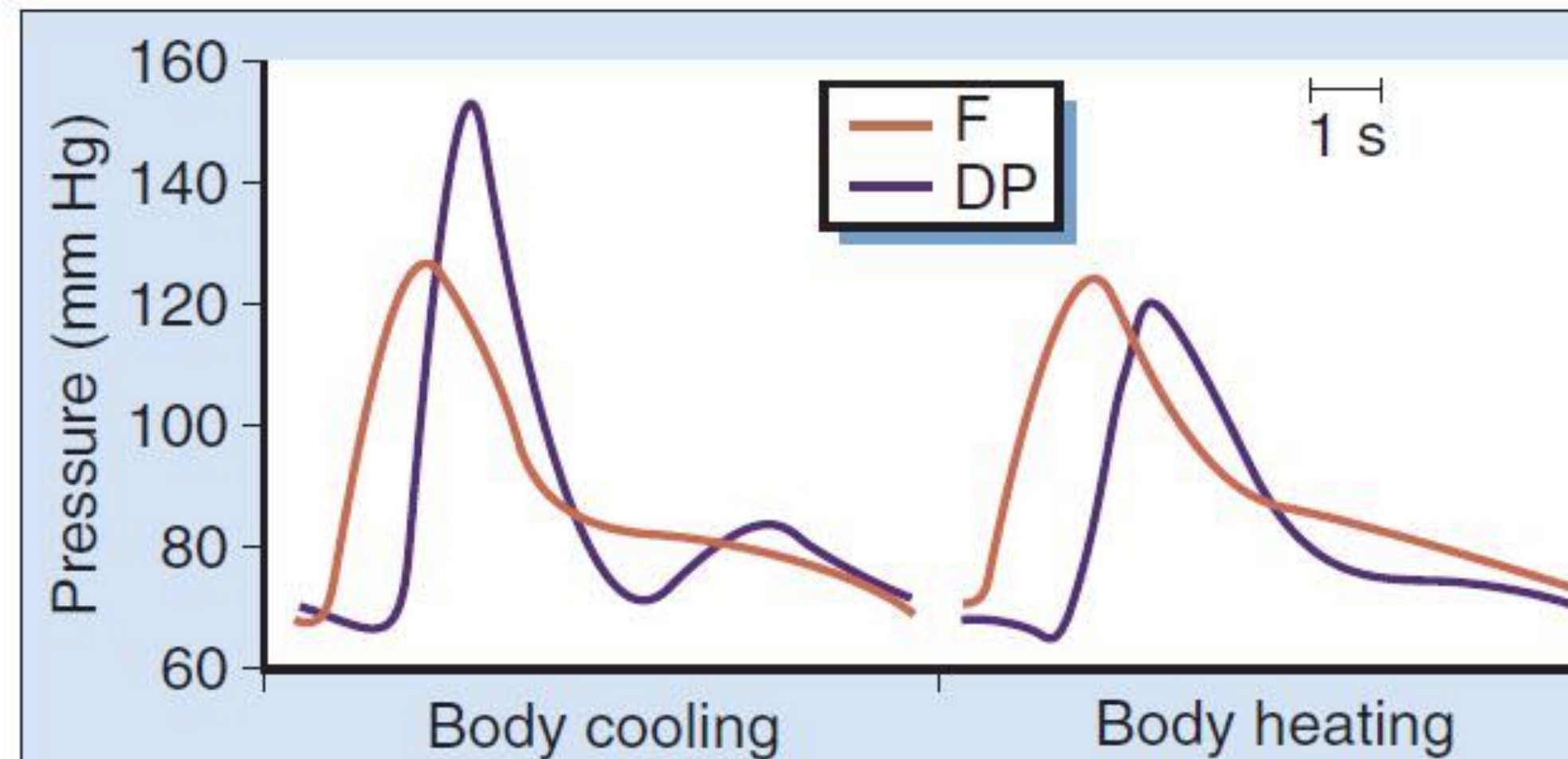
高

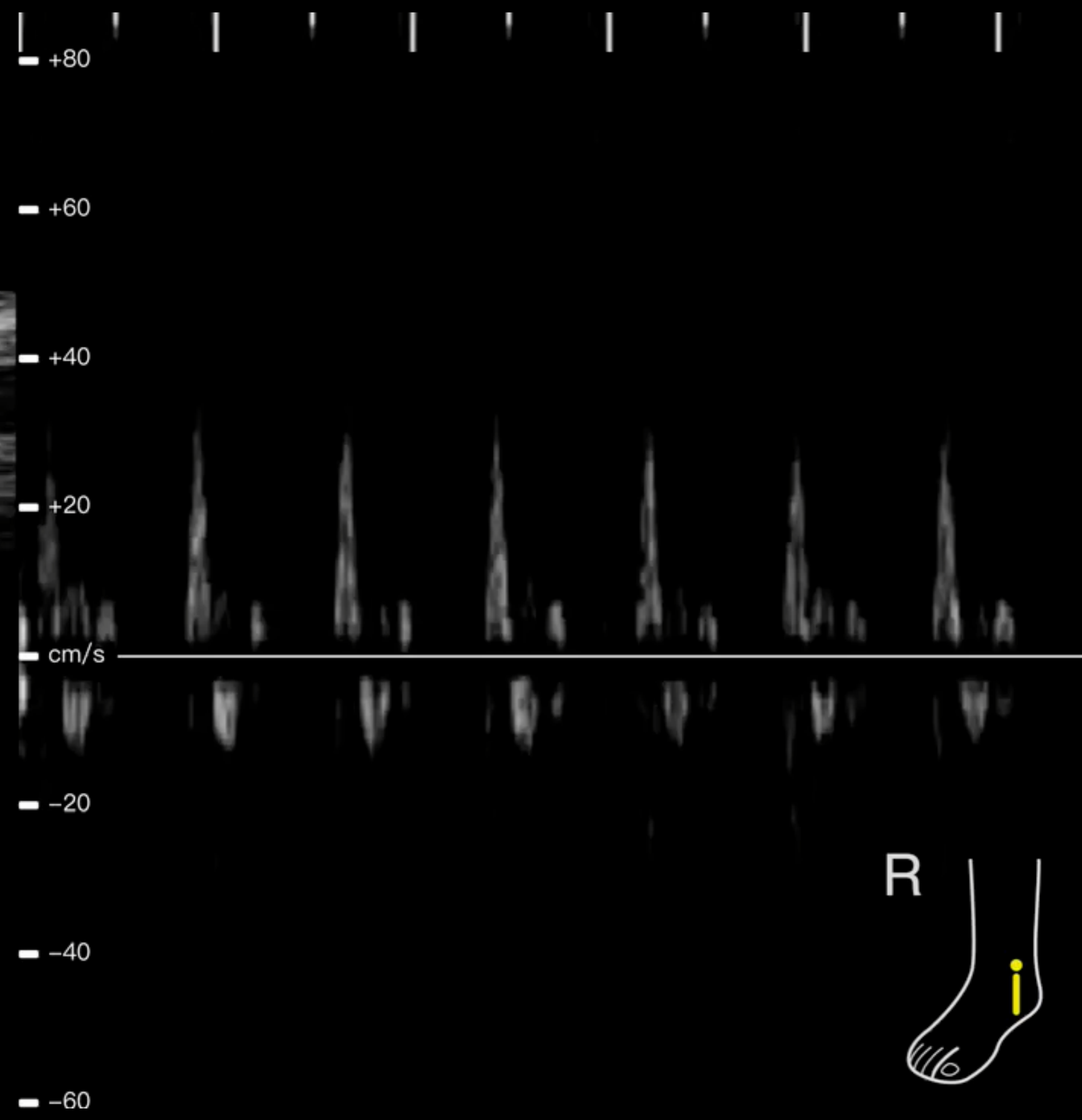
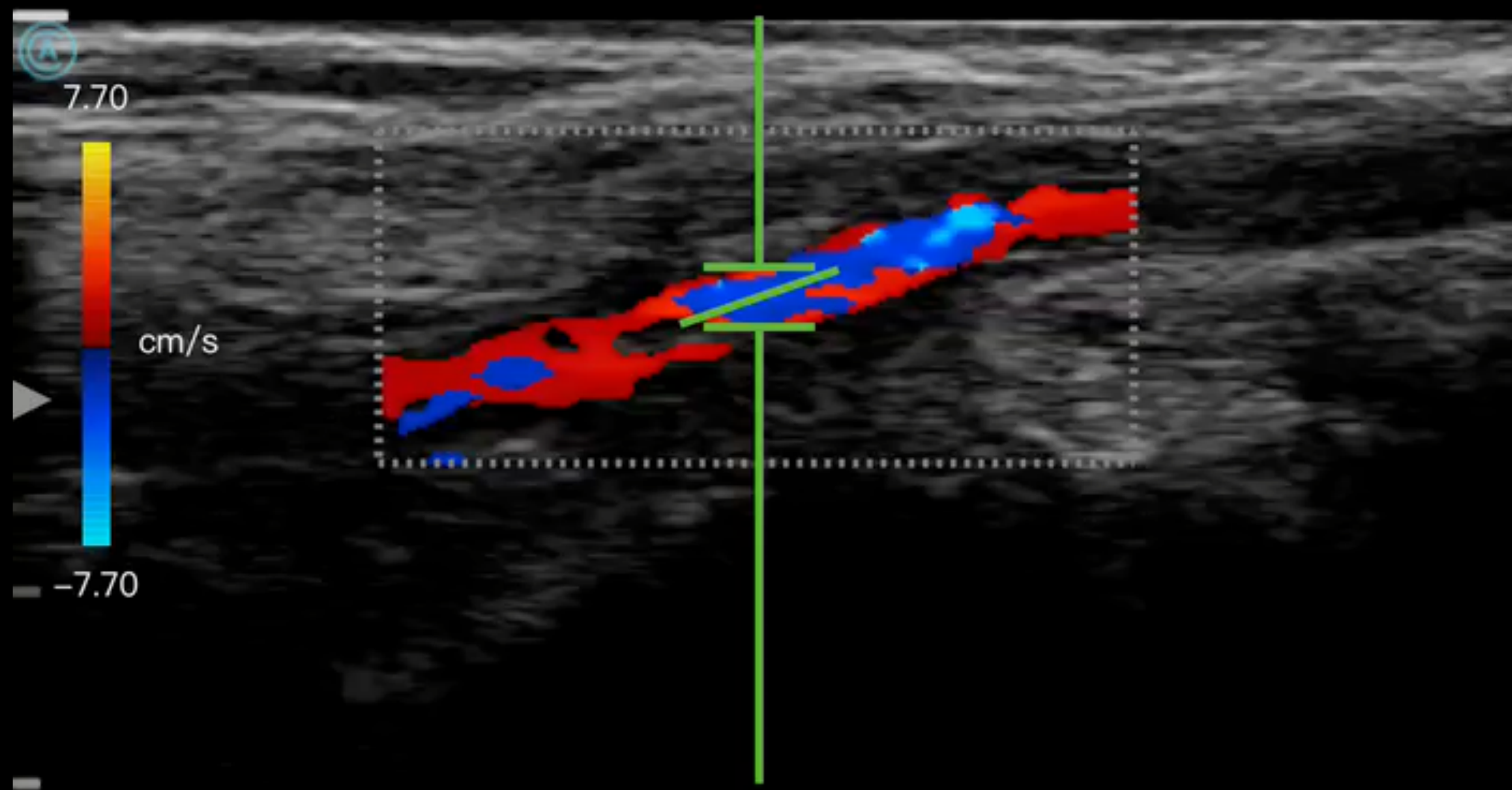


C

生理狀態的影響

溫度上升，阻力下降，血流增加

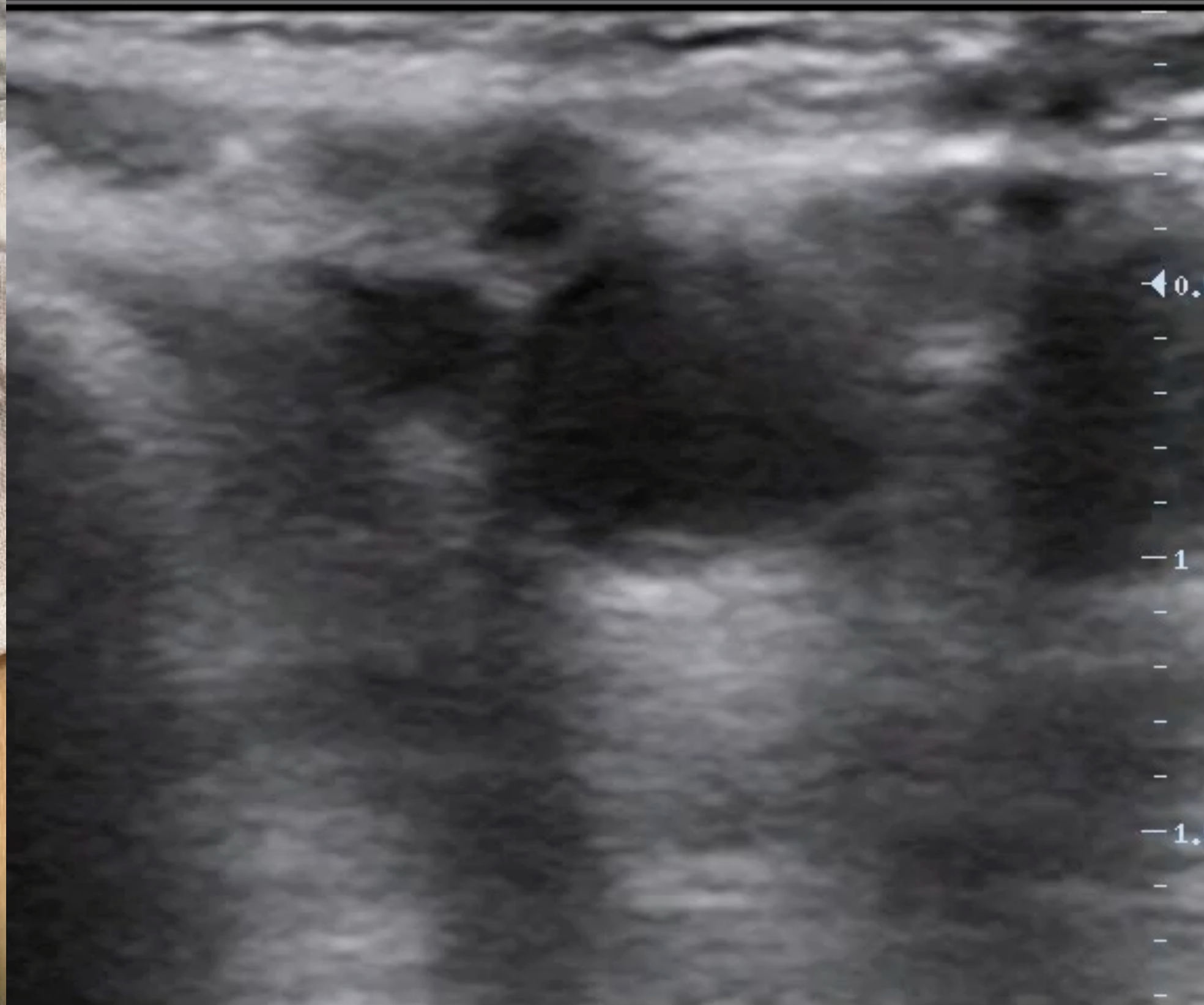




89M, right hand cyanosis

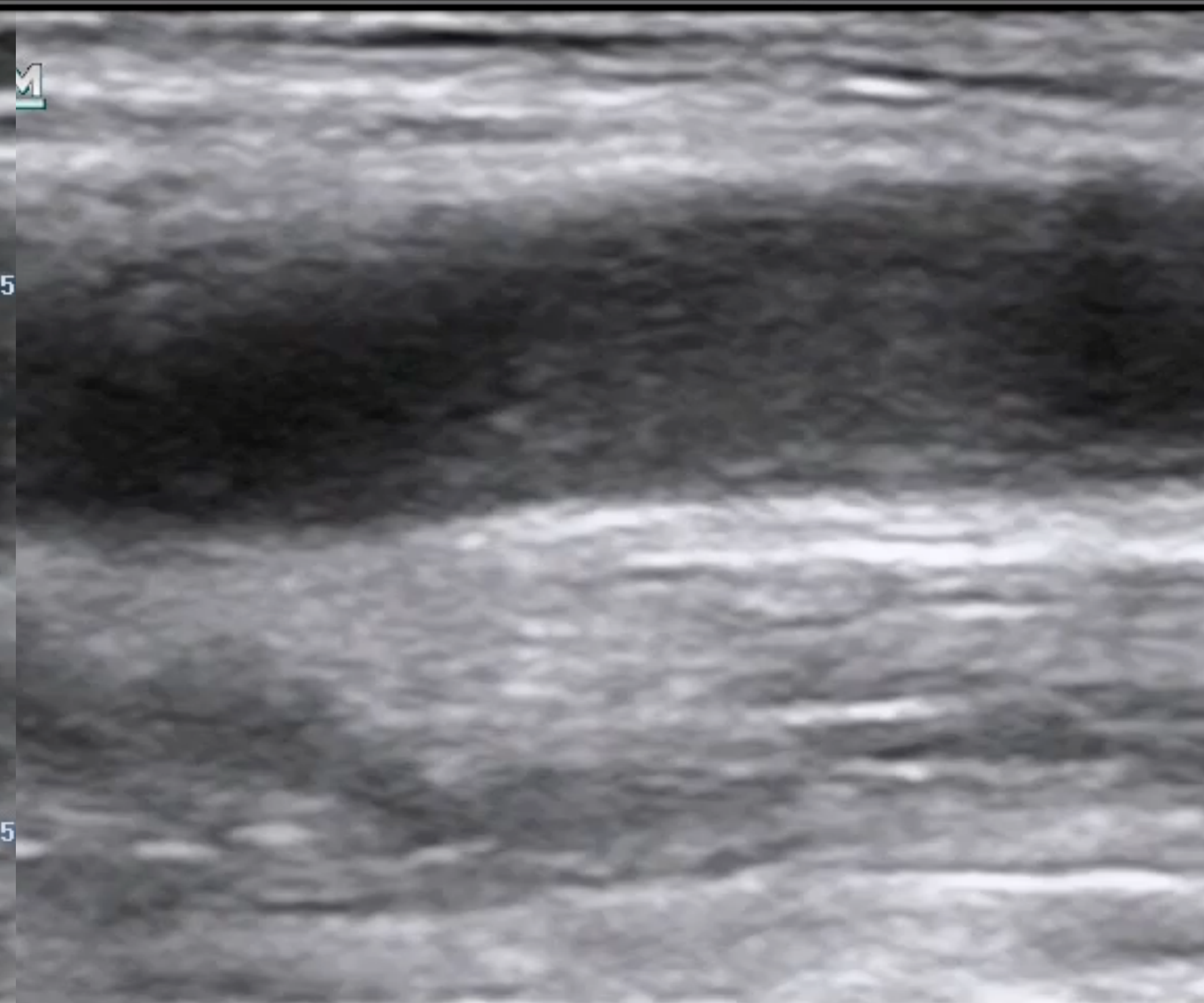


20/07/2022 11:49:15 AP 91.3% MI 1.4 TIS 0.2
L12-4s Superficial



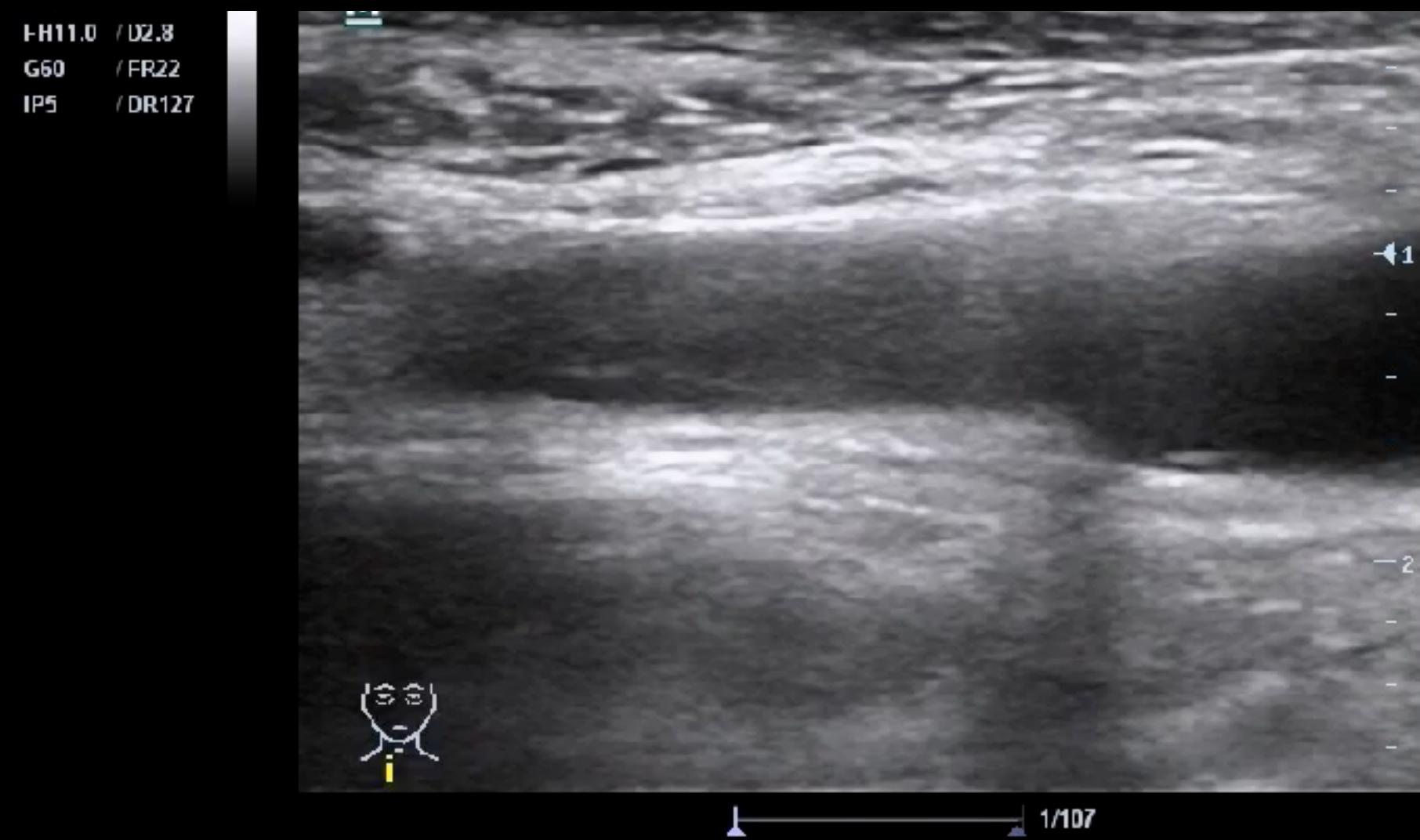
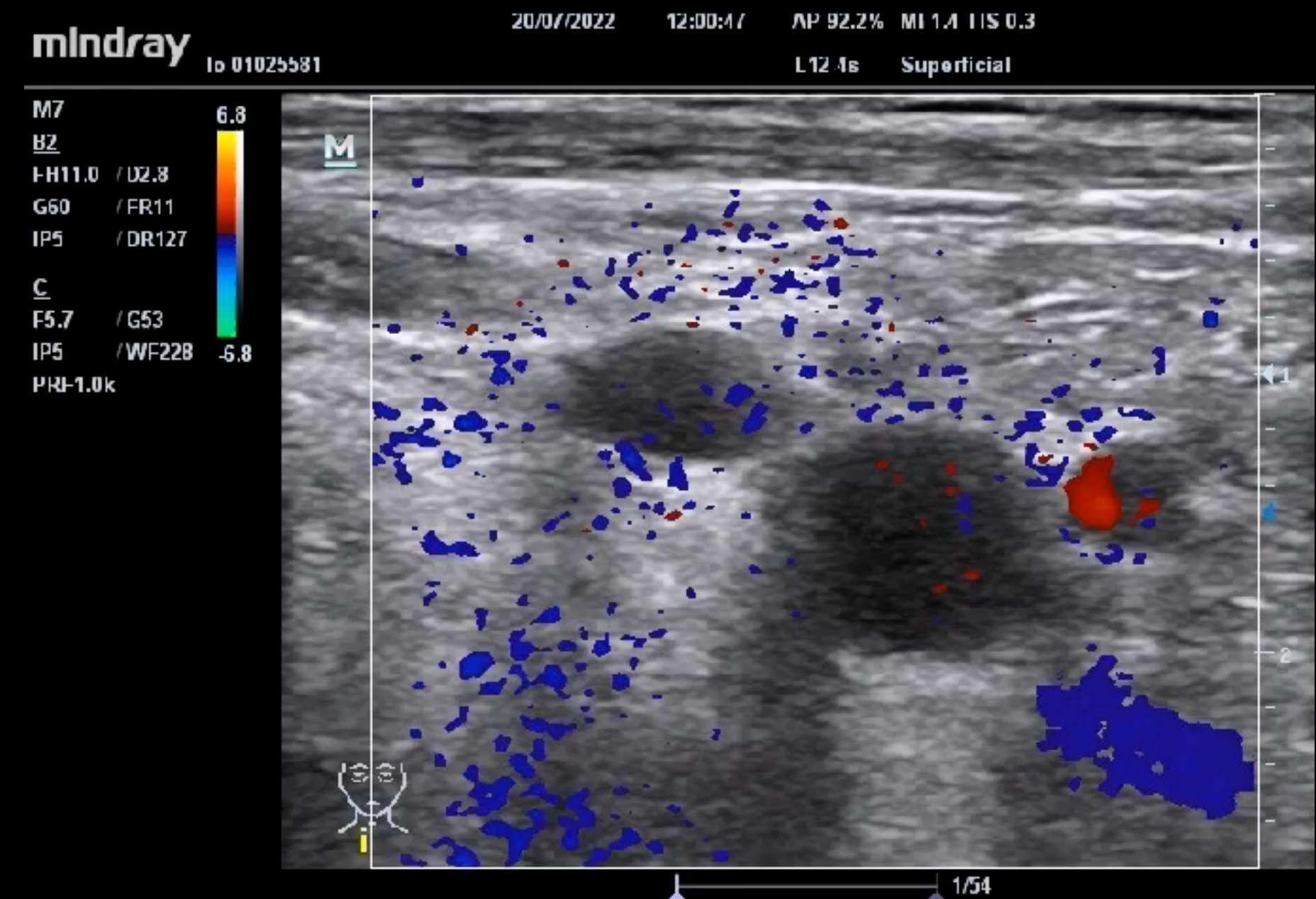
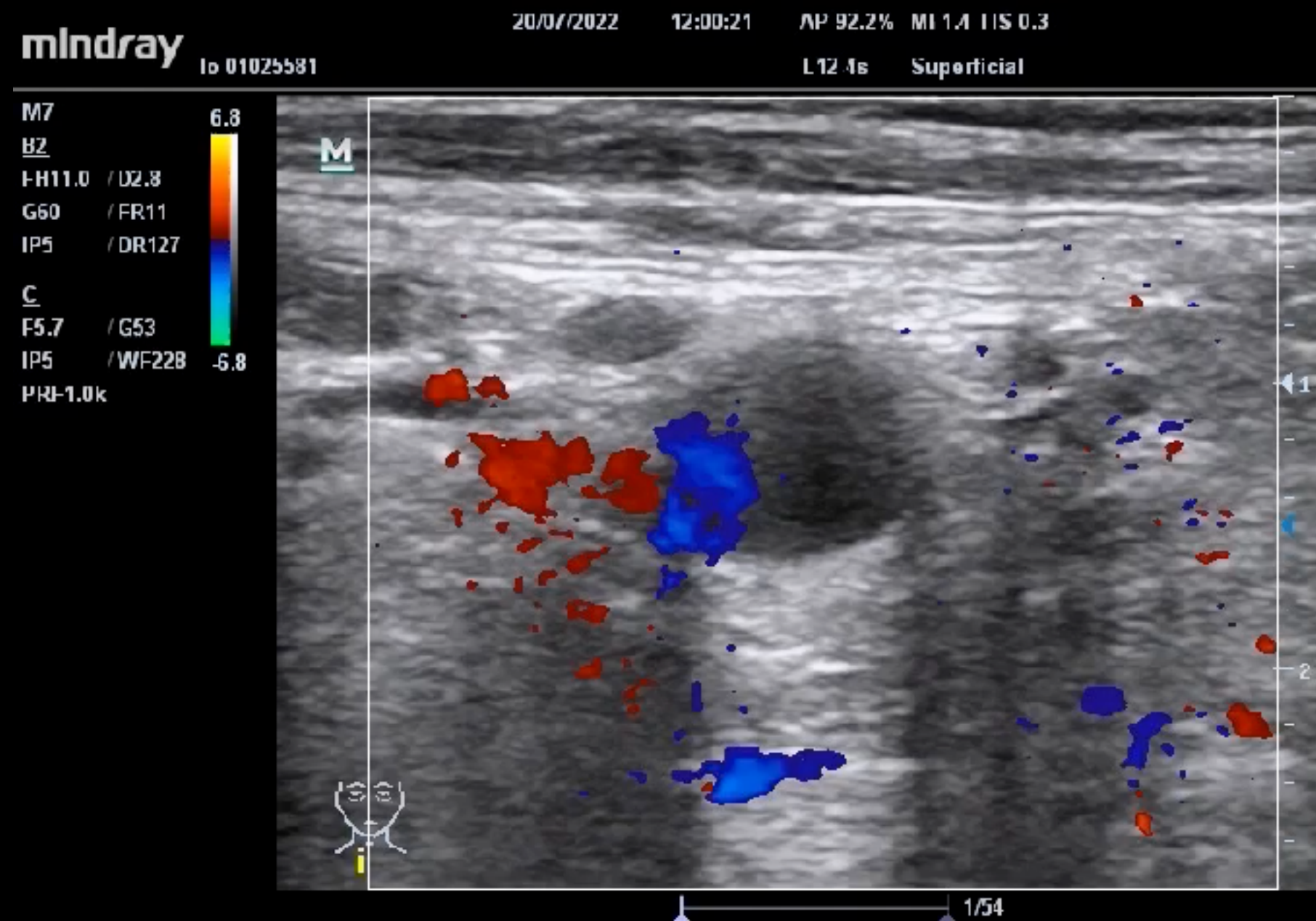
1/107

20/07/2022 11:50:31 AP 91.3% MI 1.4 TIS 0.2
L12-4s Superficial

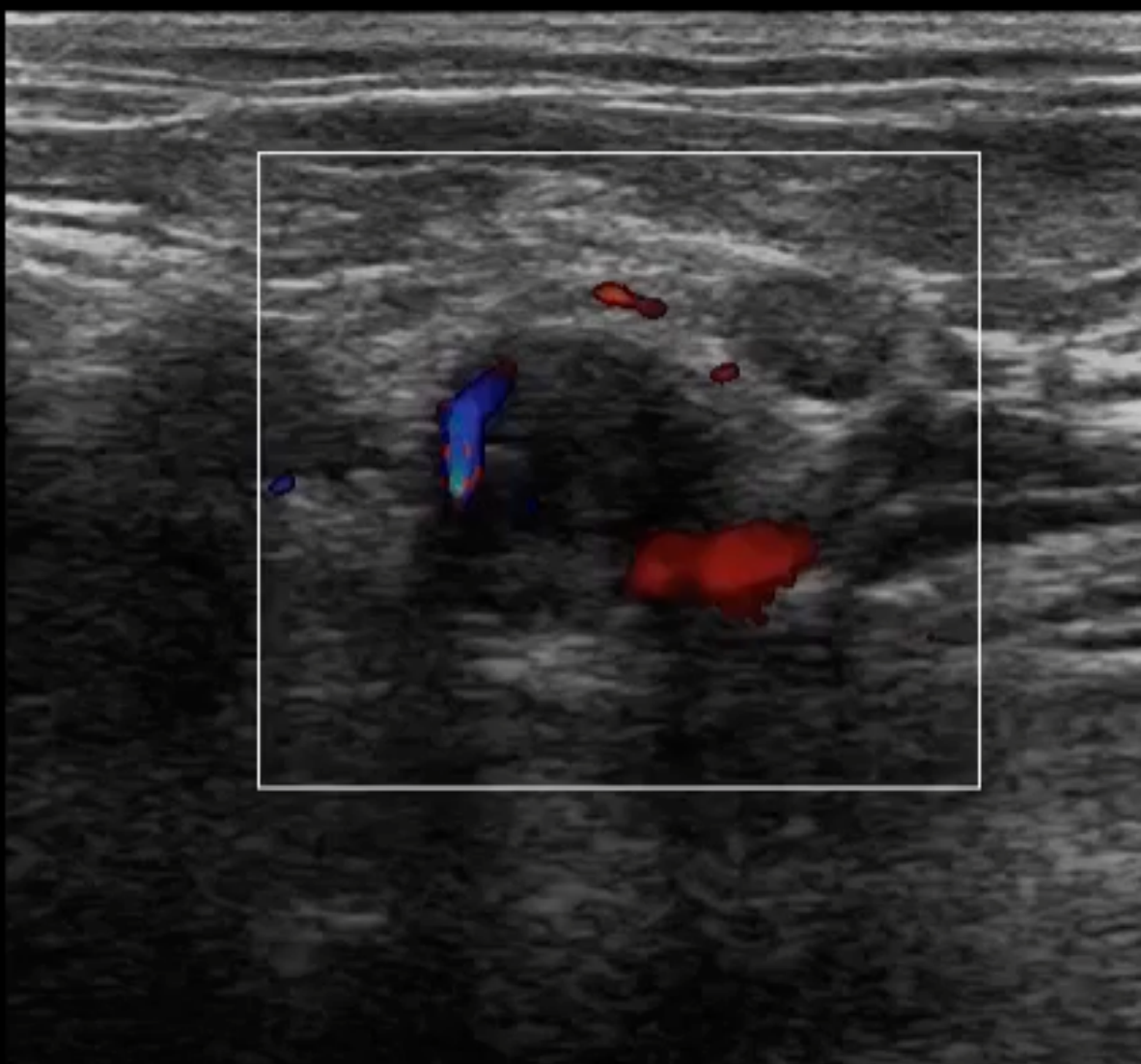


1/77

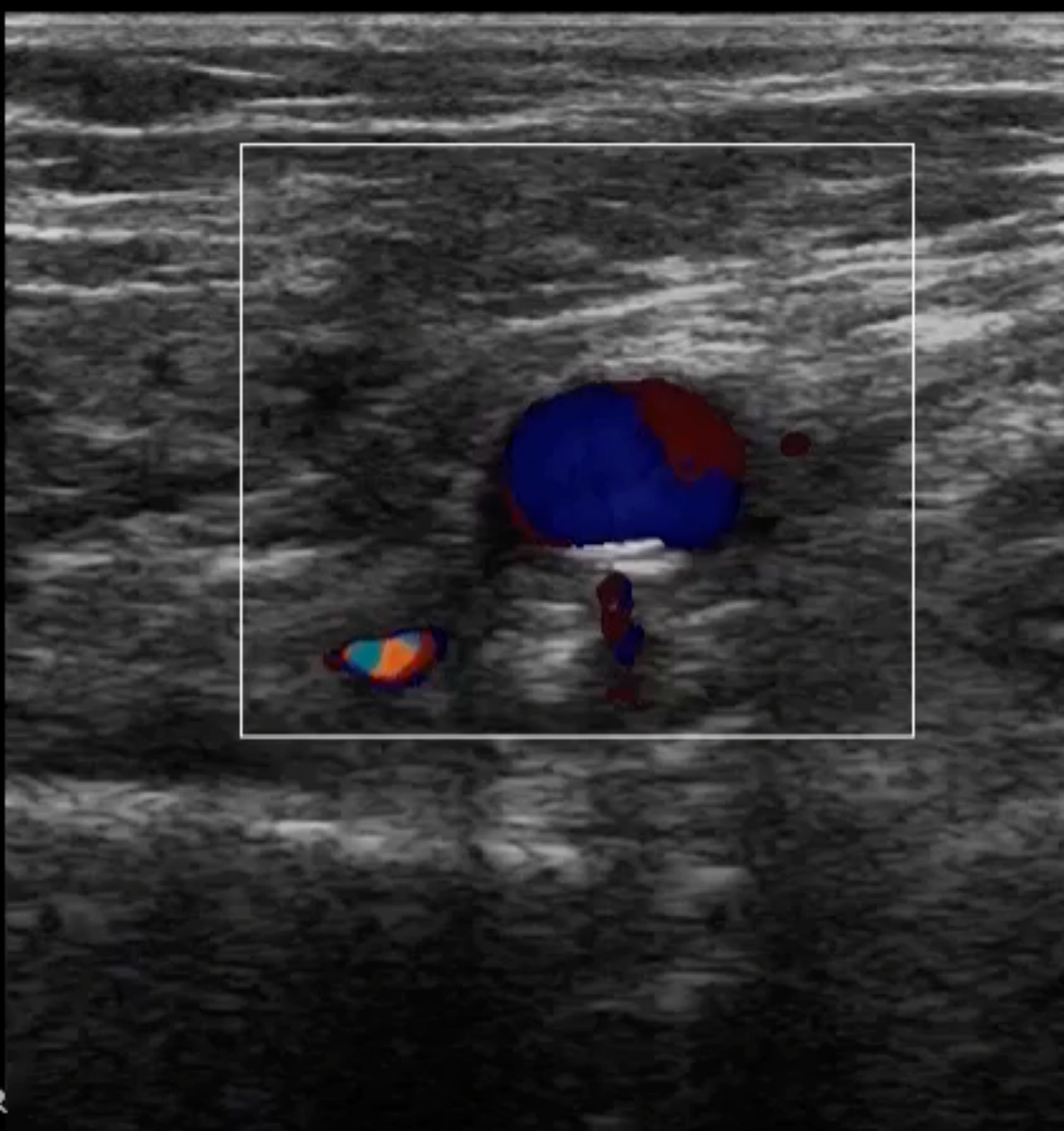
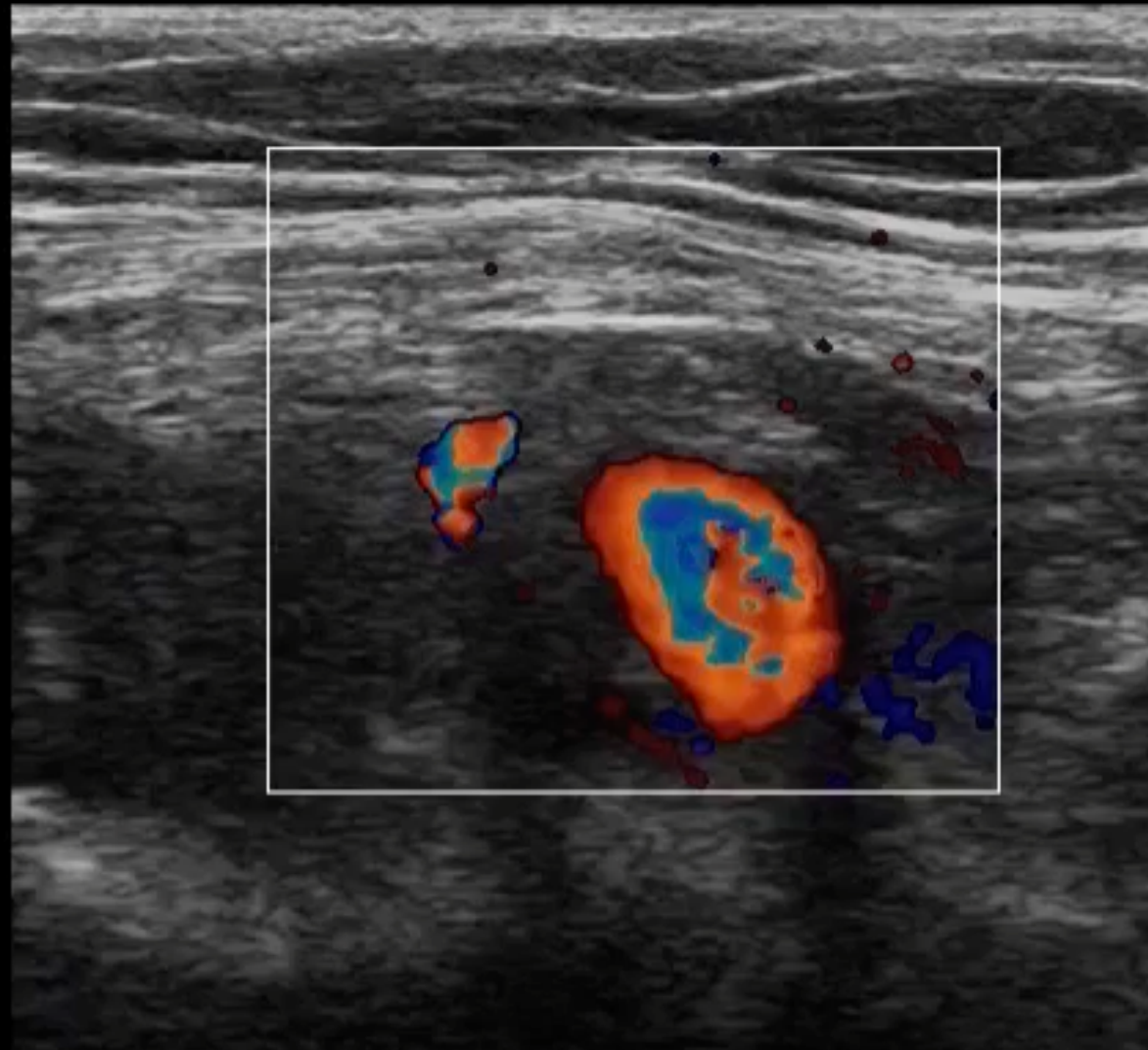
Axillary artery thrombus



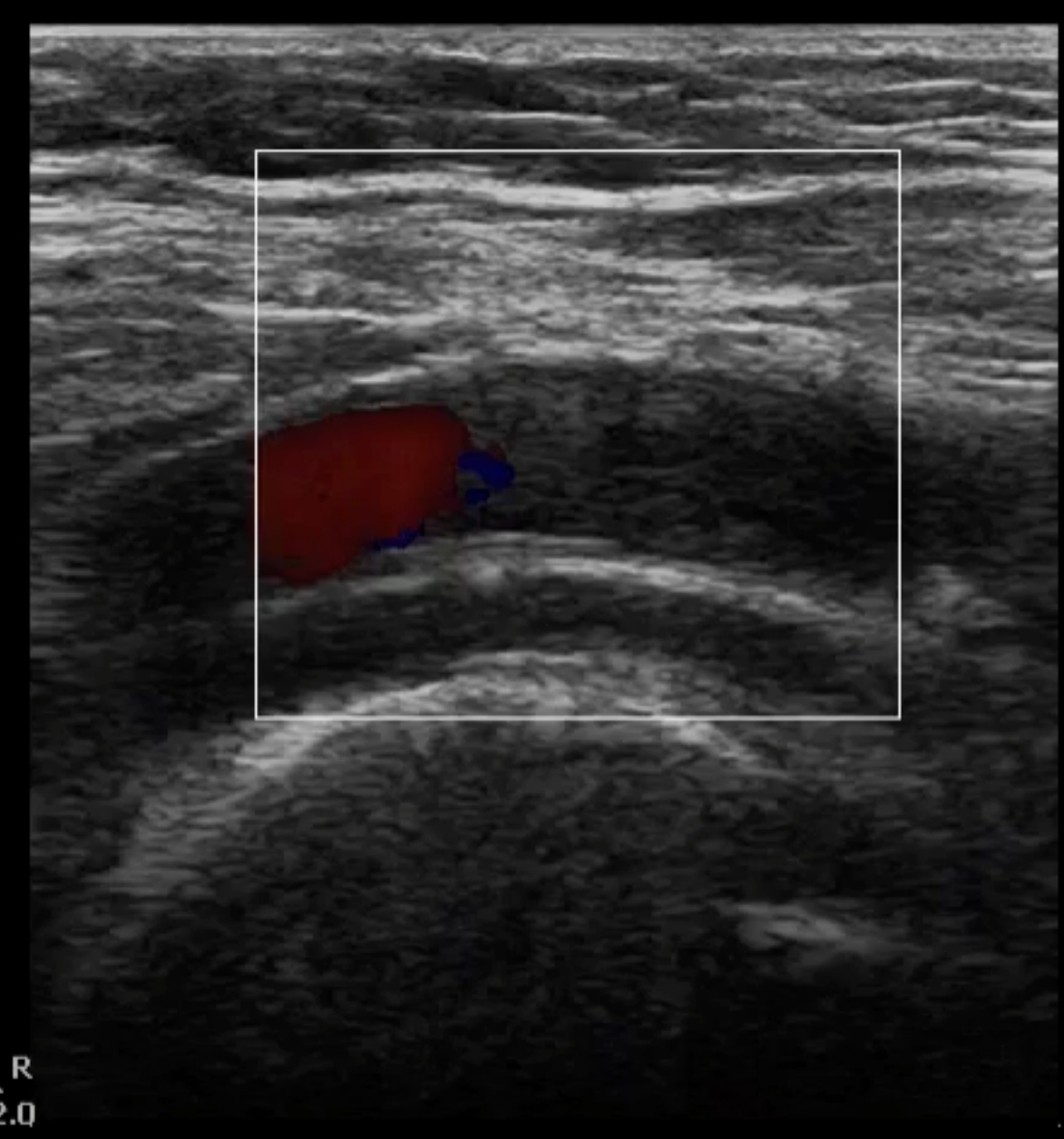
85F, 右大腿酸痛約一天



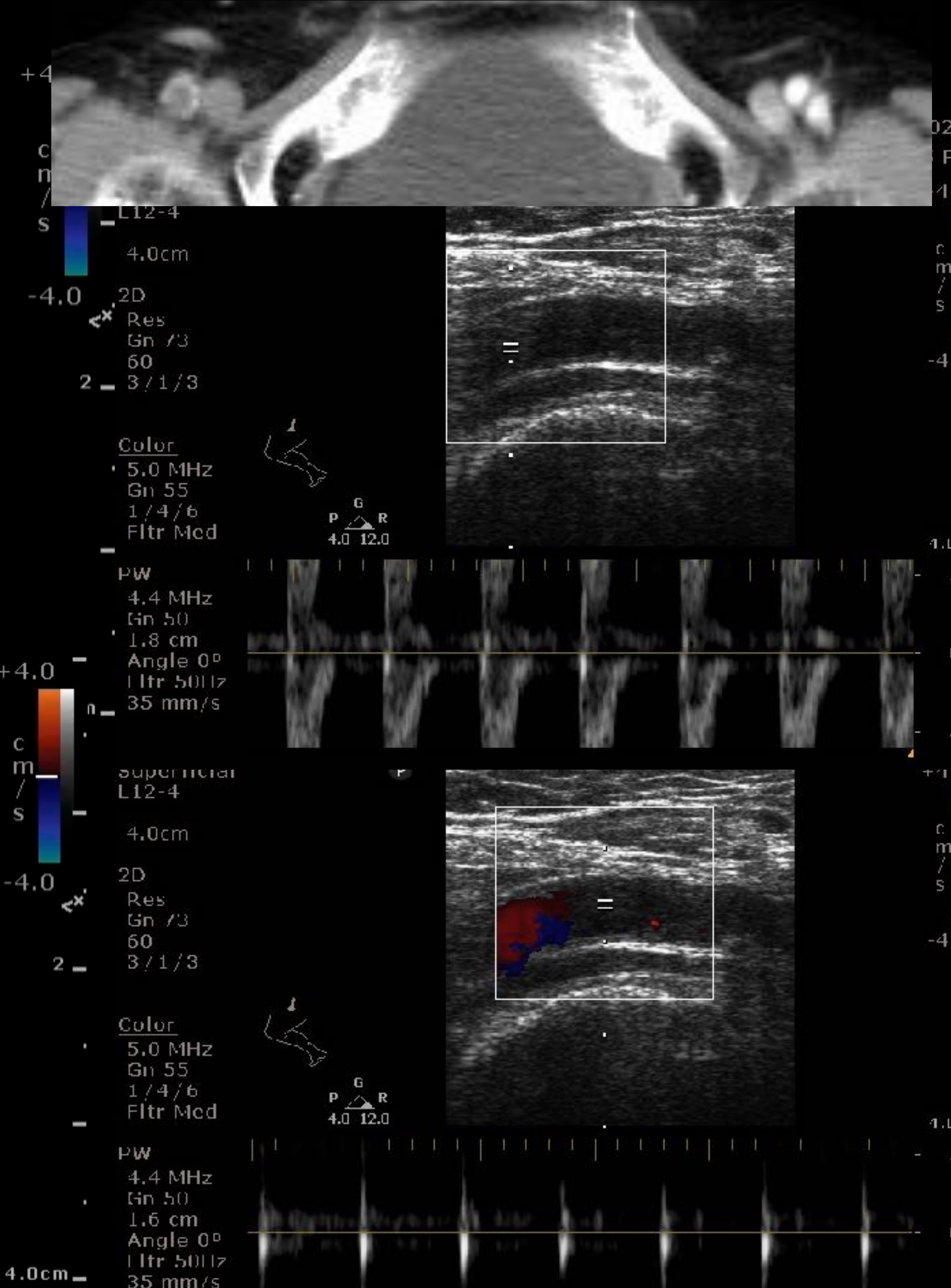
P



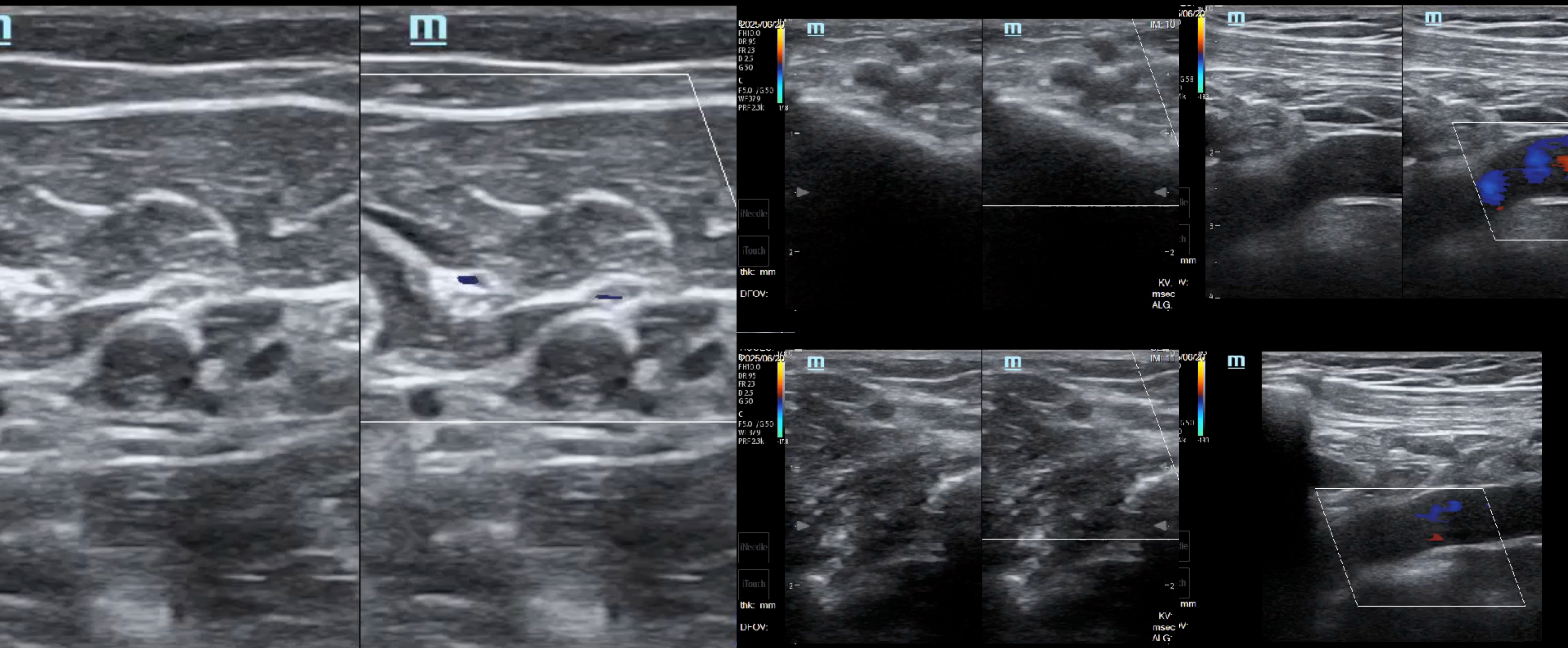
P



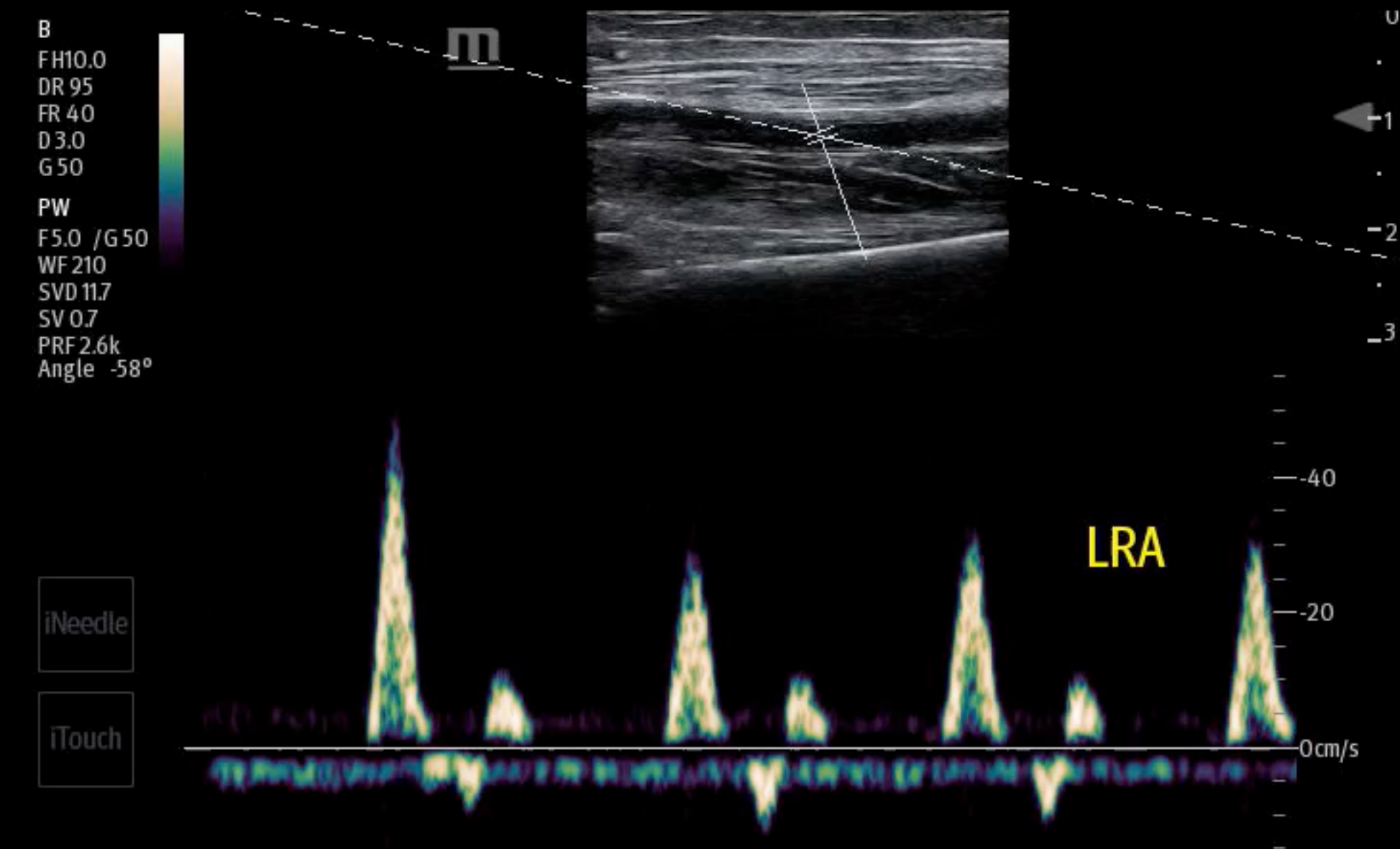
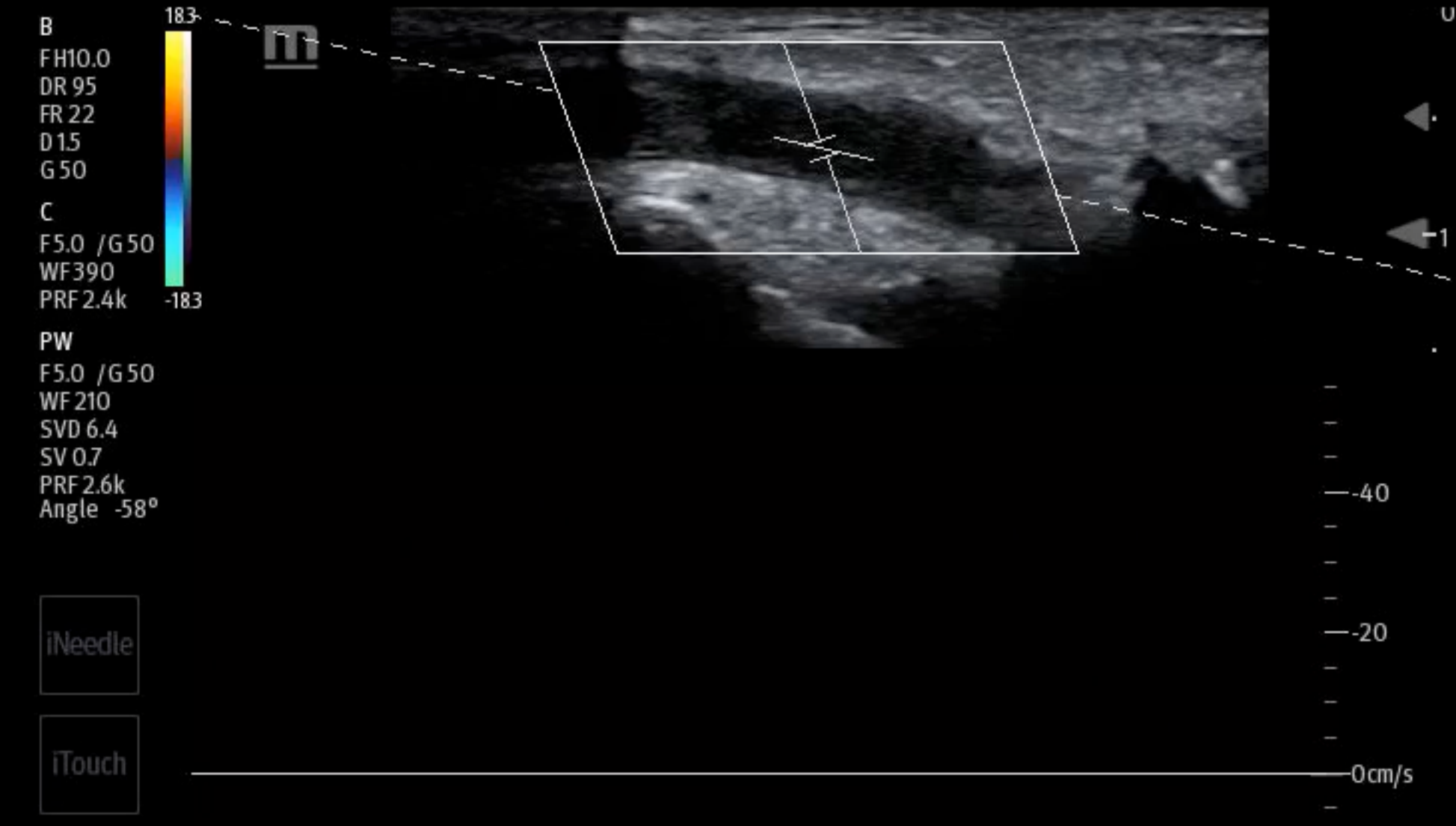
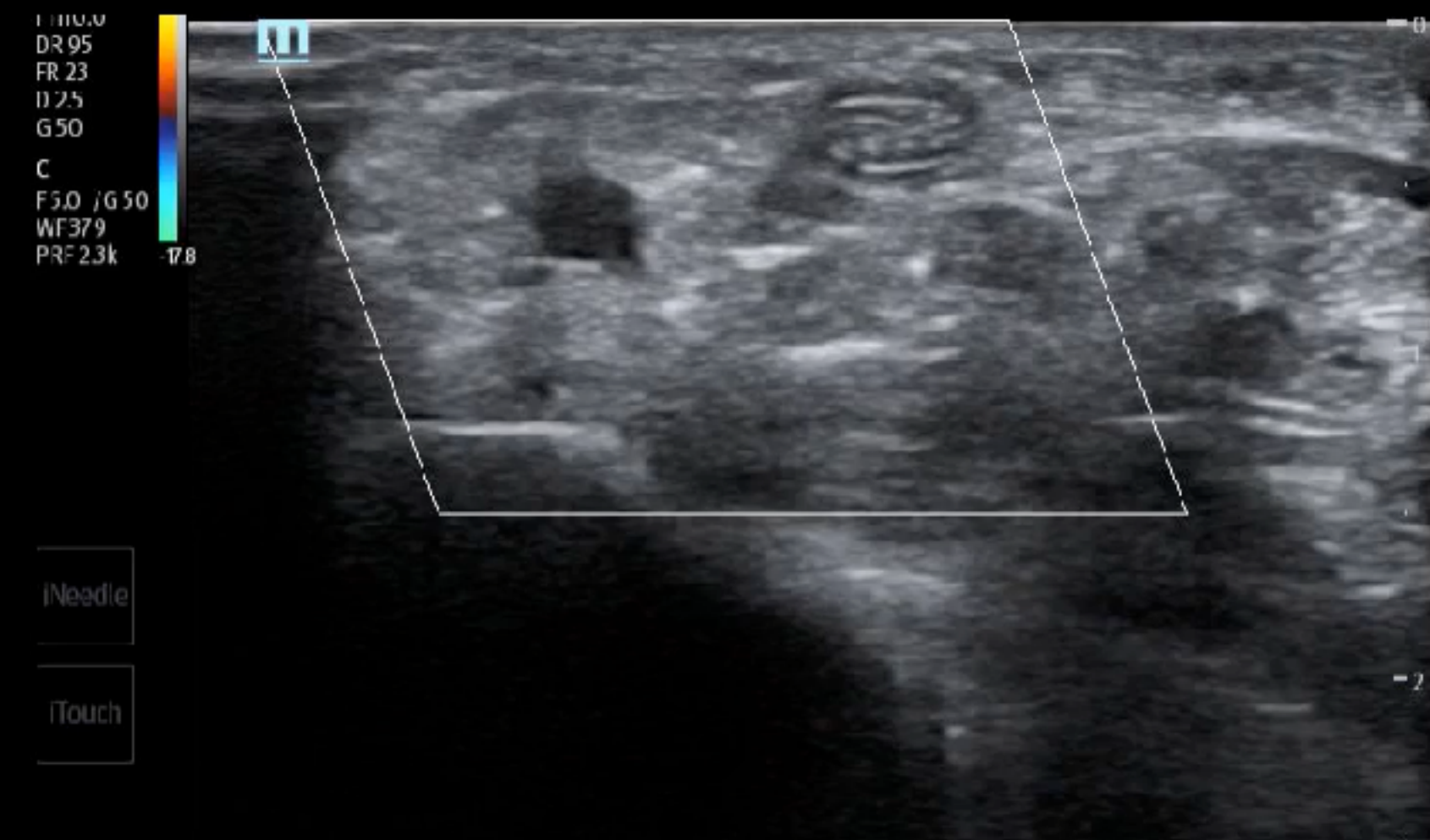
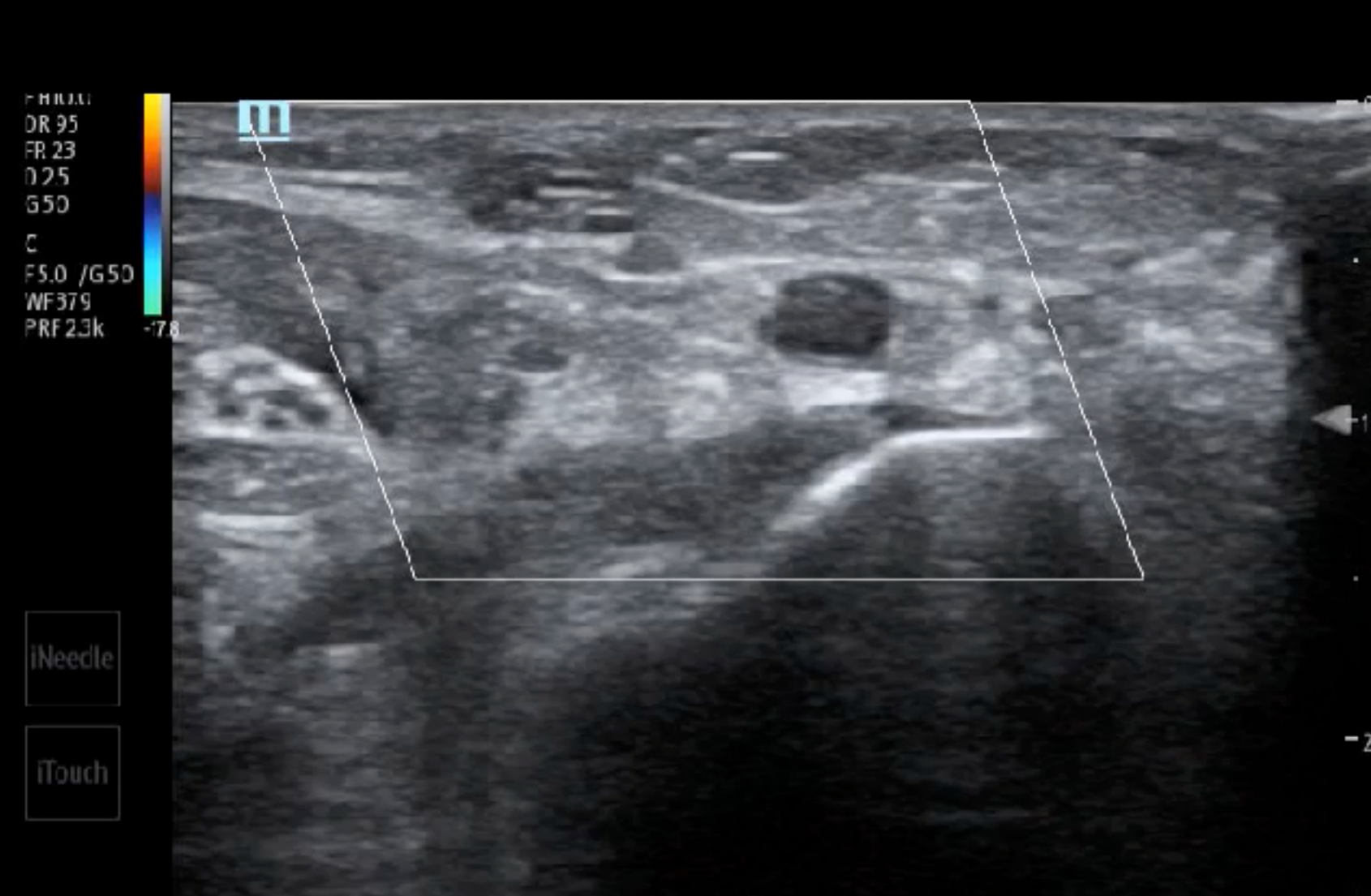
G
P R
4.0 12.0



88F, 左上肢冰冷疼痛數日



54M, left hand pain & cyanosis for 1 D



88F



2025/08/07
FH10.0
DR 95
FR 23
D 3.5
G 58
C
F5.0 /G 50
WF379
PRF 2.3k
-17.8

iNeedle
iTouch

2025/08/07
FH10.0
DR 95
FR 23
D 3.5
G 58
C
F5.0 /G 50
WF379
PRF 2.3k
-17.8

PW
F5.0 /G 78
WF 236
SVD 113
SV 2.0
PRF 2.9k
Angle -59°

iNeedle
iTouch

thk: mm

DFOV: ↑

ChenKC@POCUSacademy

DR 130
FR 24
D 5.0
G 57
C
F2.0 /G 58
WF312
PRF 1.1k
-20.8

iNeedle
iTouch

thk: mm

16

2025/08/07
FH10.0
DR 95
FR 23
D 3.5
G 58
C
F5.0 /G 50
WF379
PRF 2.3k
-17.8

iNeedle
iTouch

IM: 11
2025/08/07
FH10.0
DR 95
FR 31
D 3.5
G 58
C
F5.0 /G 78
WF390
SVD 123
SV 1.4
PRF 4.3k
Angle -60°

iNeedle
iTouch

thk: mm

DFOV: ↑

KV: msec
ALG:

ChenKC@POCUSacademy

DR 130
FR 24
D 5.0
G 57
C
F2.0 /G 58
WF312
PRF 1.1k
-20.8

iNeedle
iTouch

thk: mm

IM: 14
2025/08/07
FH10.0
DR 95
FR 31
D 3.5
G 58
C
F5.0 /G 78
WF390
SVD 123
SV 1.4
PRF 4.3k
Angle -60°

iNeedle
iTouch

thk: mm

DFOV: ↑

KV: msec
ALG:

Take Home Message

上肢: 建議由 BA 開始

下肢: 建議由踝部開始

monophasic要想到PAOD

