

# Iliocaval Duplex Ultrasound with Image Optimization

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## Disclosures

None

## How to Optimize Performance

**Table 1.** Femoral-iliocaval tract duplex ultrasound (DU) protocol

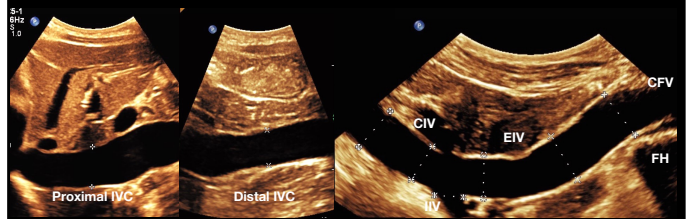
Gray-scale imaging	Color flow and pulsed wave Doppler
CFV diameter proximal	CFV waveform with distal thigh augmentation
EIV diameters distal, mid, proximal	EIV waveforms distal, mid, proximal
IIV diameter origin	IIV waveform
CIV diameters distal and proximal	CIV waveform distal, proximal, and iliocaval confluence
IVC diameter distal	IVC waveform distal and proximal
IVC diameter proximal	



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## Iliocaval Outflow Tract

Utilizing the **orange chroma tint** enhances the visual perception of the image leveraging our ability discern higher resolution in the spectrum of colors as opposed to conventional shades of black and white

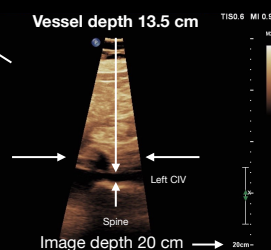
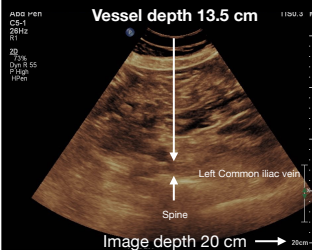


## Optimize for Technically Challenging Patients

BMI 46, LT PTS, ankle ulcer  
Suboptimal image quality

Iliocaval confluence

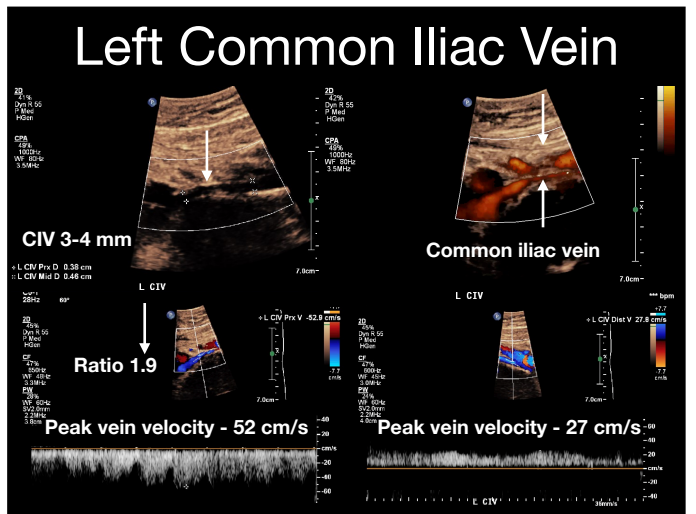
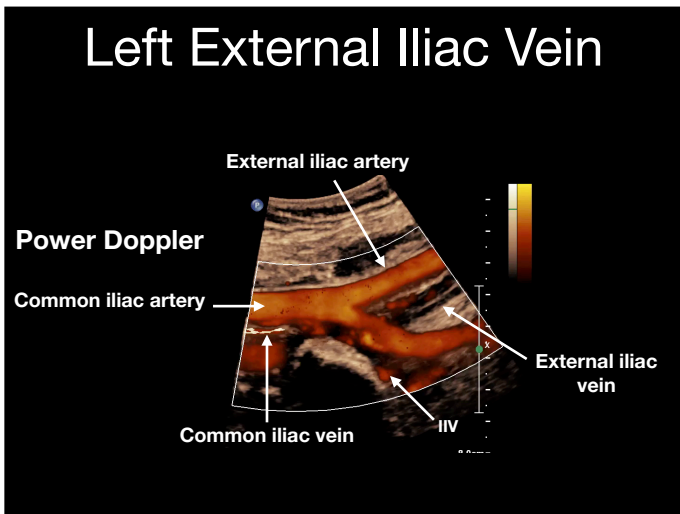
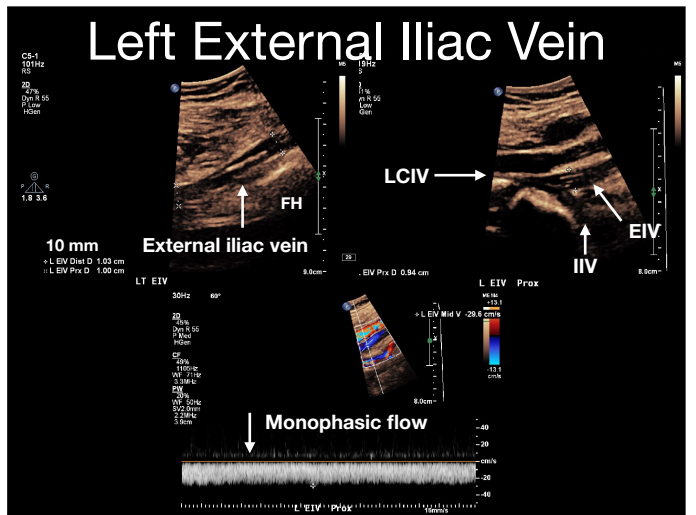
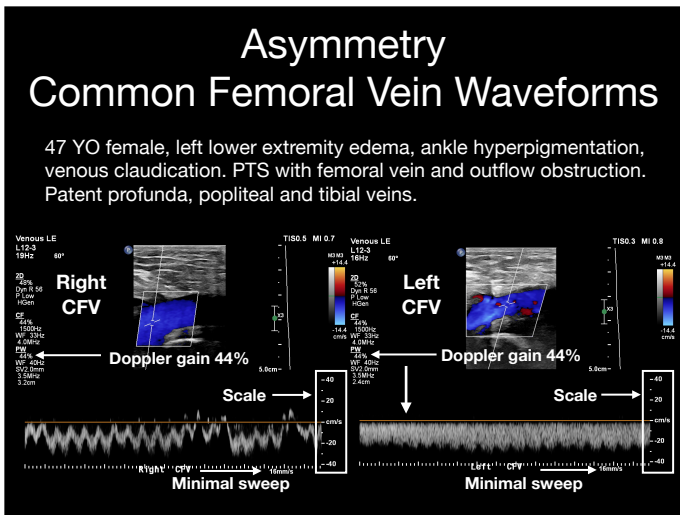
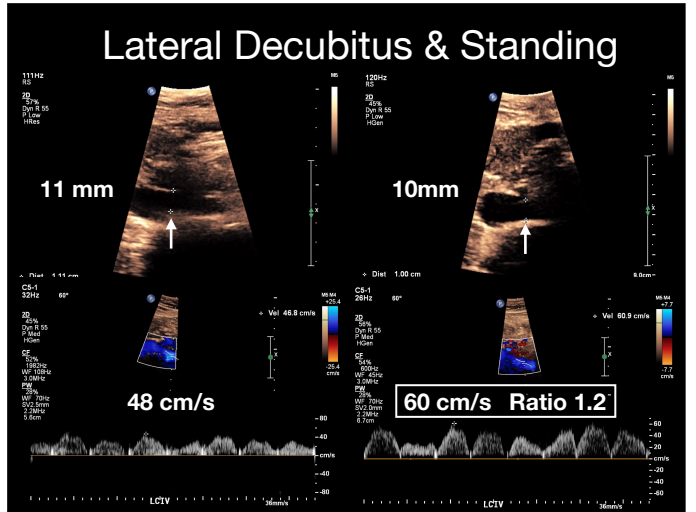
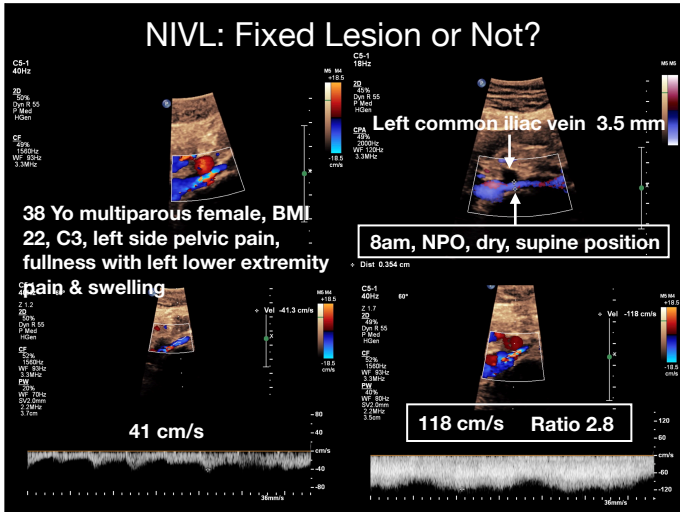
- Narrow sector width
- ↑Frame rate 63Hz
- TGC adjusted



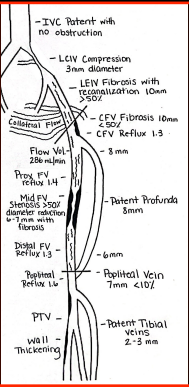
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## How to Optimize Patient Prep & Positioning

- Morning schedule, 8am-12pm, NPO, hydrated with Gas-X, 2 tabs the night before and 2 tabs the morning of the exam to minimize bowel gas
- Empty urinary bladder prior to start of exam
- Supine position with head elevation ~10-15°, utilizing the anterior approach
- L/R decubitus and standing positions as needed
- Under garments must be removed, gown and privacy drape sheet must be provided

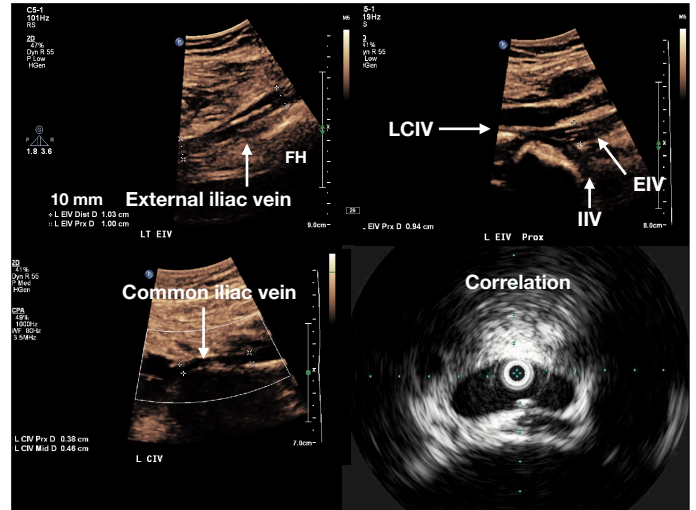
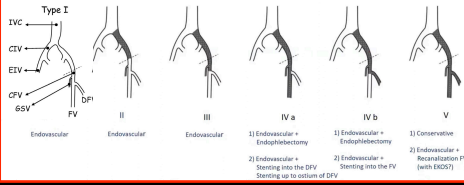


# Deep Vein Map & Inflow Classification System



## Prognostic Value of a Classification System for Iliofemoral Stenting in Patients with Chronic Venous Obstruction

Houman Jalaei, Mohammad E. Barbat, Long Piao, Suat Doganci, Nils Kucher, Mert Dumantepe, Olivier Hartung, Michael Lichtenberg, Stephen Black, Gerard O'Sullivan, Efthymios D. Avgerinos, Alun Davies, Mahmood K. Razavi, the International CVO Classification Study Group



# Correctly Optimized Iliocaval Duplex Ultrasound

- Provides real-time imaging of patency and flow
- Identifies the location and severity of obstructions
- Supports pre-procedural planning on outflow characteristics
- Facilitates the use of IVUS without requiring additional imaging modalities



Thank You