Pitfalls in Carotid Ultrasound

Brian Fowler BS, RVT
Technical Director
Syntropic CoreLab, Columbus Ohio
Disclosures

• No significant or other financial relationships with industry or commercial support to disclose
• I do not intend to discuss an unlabeled, unapproved, or investigative use of a commercial product or device
Pitfalls in Carotid Ultrasound

- Conditions that.....
  - Falsely increase velocities
  - Falsely decrease velocities
  - Change carotid waveforms
Pitfalls in Carotid Ultrasound

• Proximal Occlusion
Pitfalls in Carotid Ultrasound

• Dissection
Pitfalls in Carotid Ultrasound

- Vagal Response
Pitfalls in Carotid Ultrasound

- Young Patient
Pitfalls in Carotid Ultrasound

- Tortuosity
Pitfalls in Carotid Ultrasound

- Fibromuscular Dysplasia
Pitfalls in Carotid Ultrasound

• Takayasu Arteritis
Pitfalls in Carotid Ultrasound

- Bypass Grafts
Pitfalls in Carotid Ultrasound

- Diameter Mismatch
Pitfalls in Carotid Ultrasound

- Innominate Stenosis
Pitfalls in Carotid Ultrasound

- Aortic Stenosis
Pitfalls in Carotid Ultrasound

• Aortic Regurgitation

Moderate

Severe
Pitfalls in Carotid Ultrasound

- Pulsus Alternans – Severe Ischemic Cardiomyopathy
Pitfalls in Carotid Ultrasound

- Proximal Occlusion - CCA
Pitfalls in Carotid Ultrasound

- IABP
Pitfalls in Carotid Ultrasound

- IAPB

**Pump On**

**Pump Off**
Pitfalls in Carotid Ultrasound

• Conclusions
  • Waveforms matter
  • Velocities are impacted by numerous conditions
  • Look at what vessels are impacted
Pitfalls in Carotid Ultrasound

Thanks!