Use of Carbon Dioxide (CO₂) in the Office Interventional Suite

Bret N. Wiechmann, MD FSIR FAHA FSVM

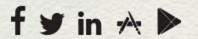
Medical Director Vascular & interventional Physicians Gainesville, Florida, USA

Clinical Assistant Professor of Radiology University of Florida Gainesville, Florida



19th Annual Conference





Disclosures

Honorarium:

Cardinal Health/Cordis

Consultant:

• BD/Bard Peripheral Vascular

Stockholder:

- PQ Bypass
- Morris Innovative

Grant/Research Support:

- Medtronic
- Boston Scientific

Medical/Scientific Boards:

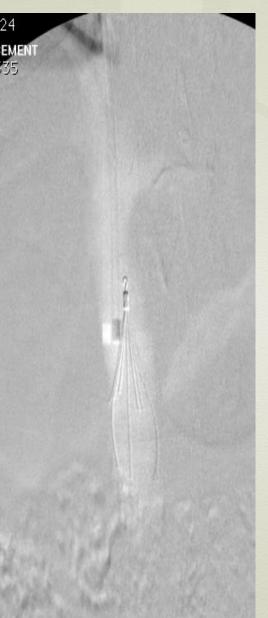
- Boston Scientific
- Morris Innovative

What are we doing?

- Increasing what we can do?
 - Peripheral angiography
 - Dialysis access management
 - IVC filter placement/removal

IVC Filter placement/retrieval





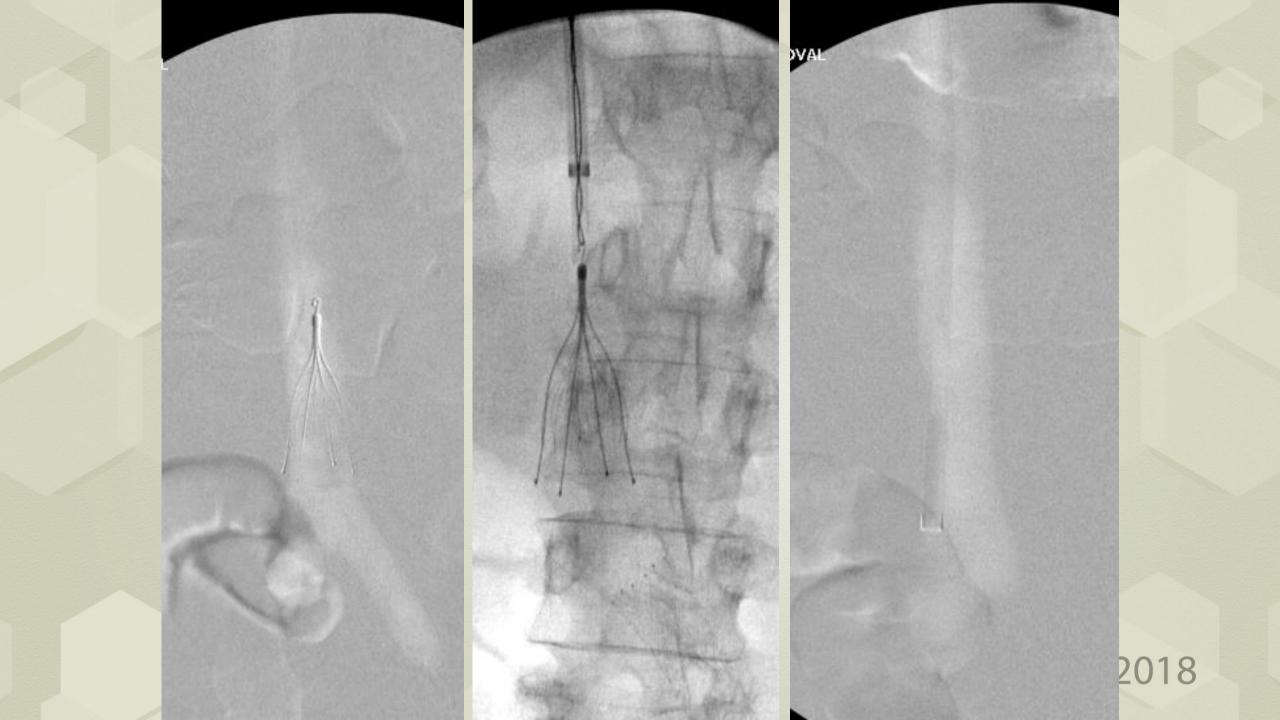


2018

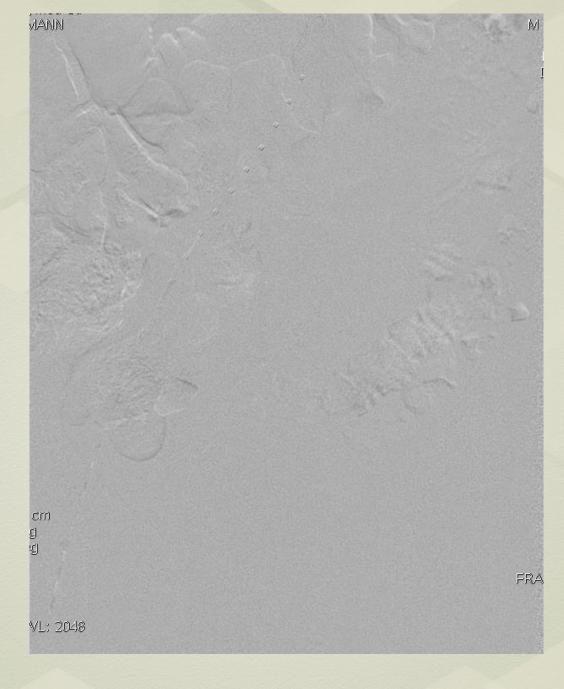
IVC filter removal

- 39yo female with May Thurner Syndrome
- IVCF placed prophylactically for IVC thrombus extension
- 4 weeks post intervention, on oral anticoagulation



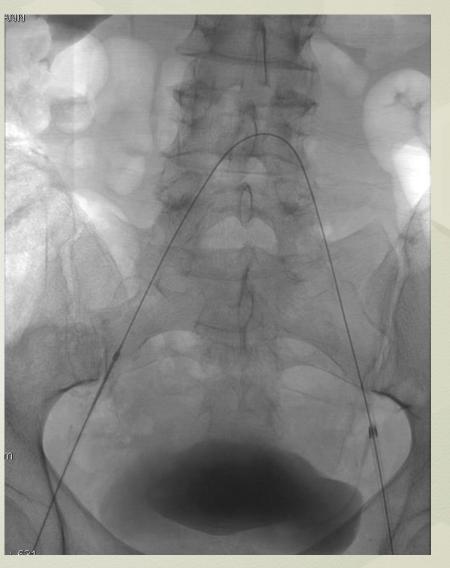


Peripheral angiography: Claudication

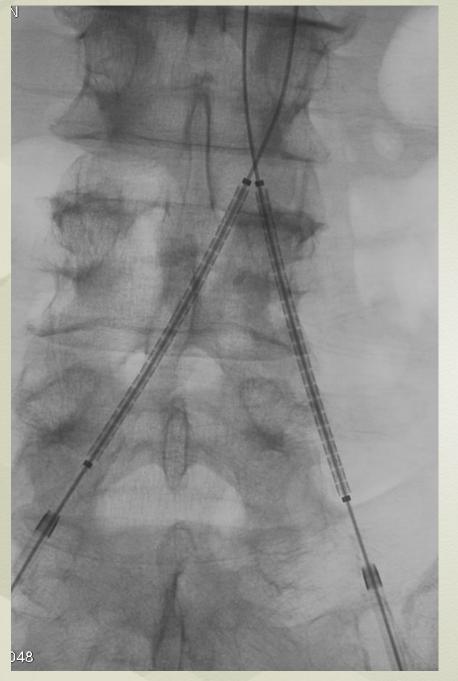


Antegrade recanalization





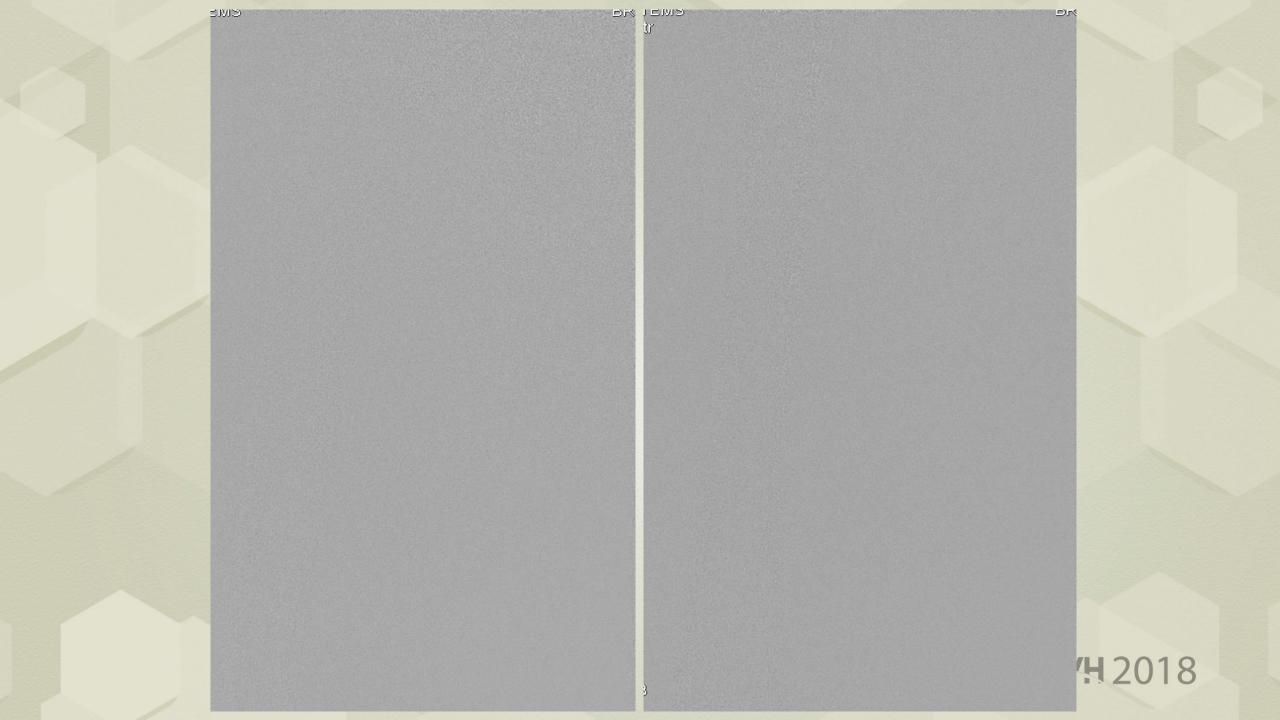
Wire floss

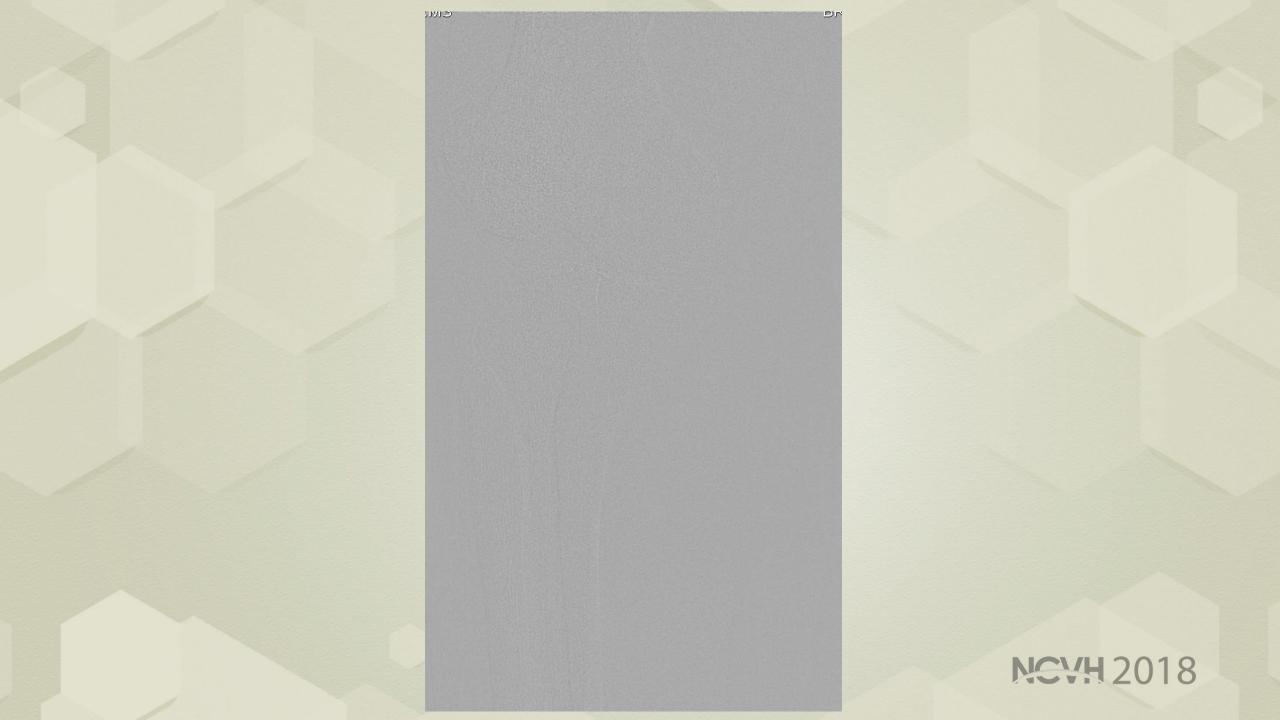




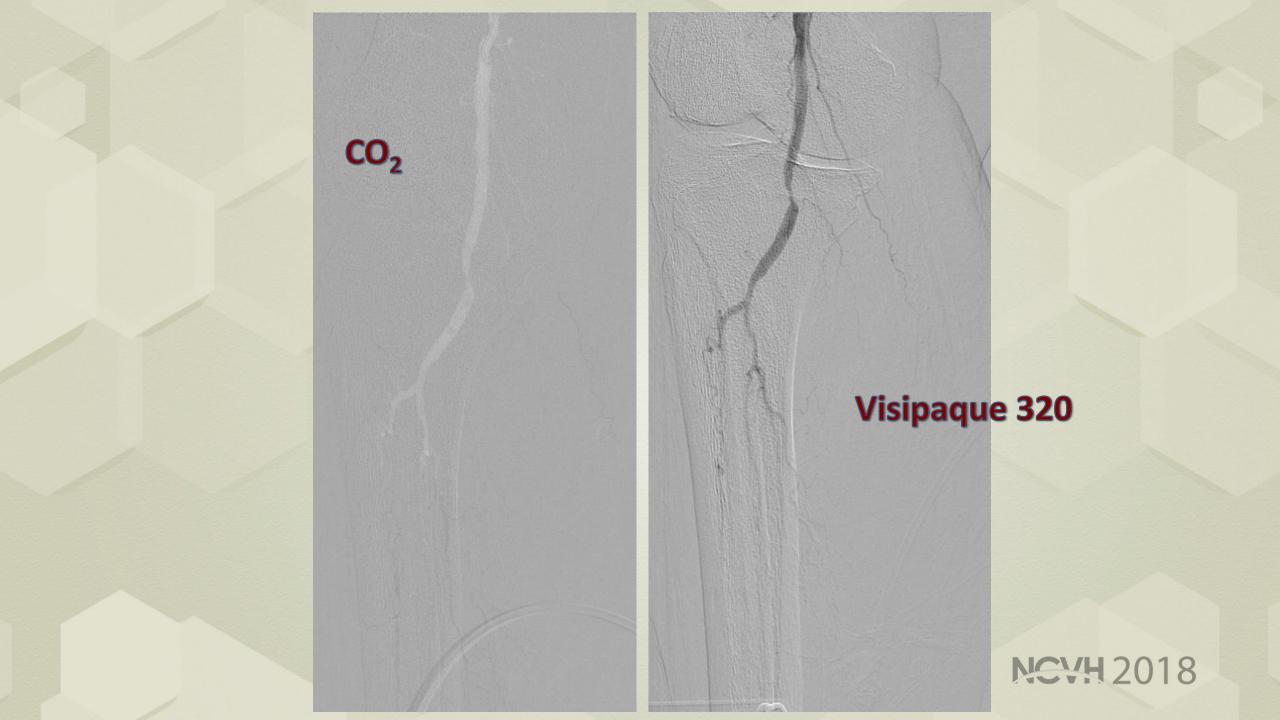
Peripheral Angiography: CO₂ in Critical Limb Ischemia

- 90yo F with RB4 ischemia & R toe#2 ulcer
- BMI 20
- Serum Cr = 2.0, eGFR = 30
- Incomplete ABI (noncompressible vessels)
 - Right toe pressures 34mmHg

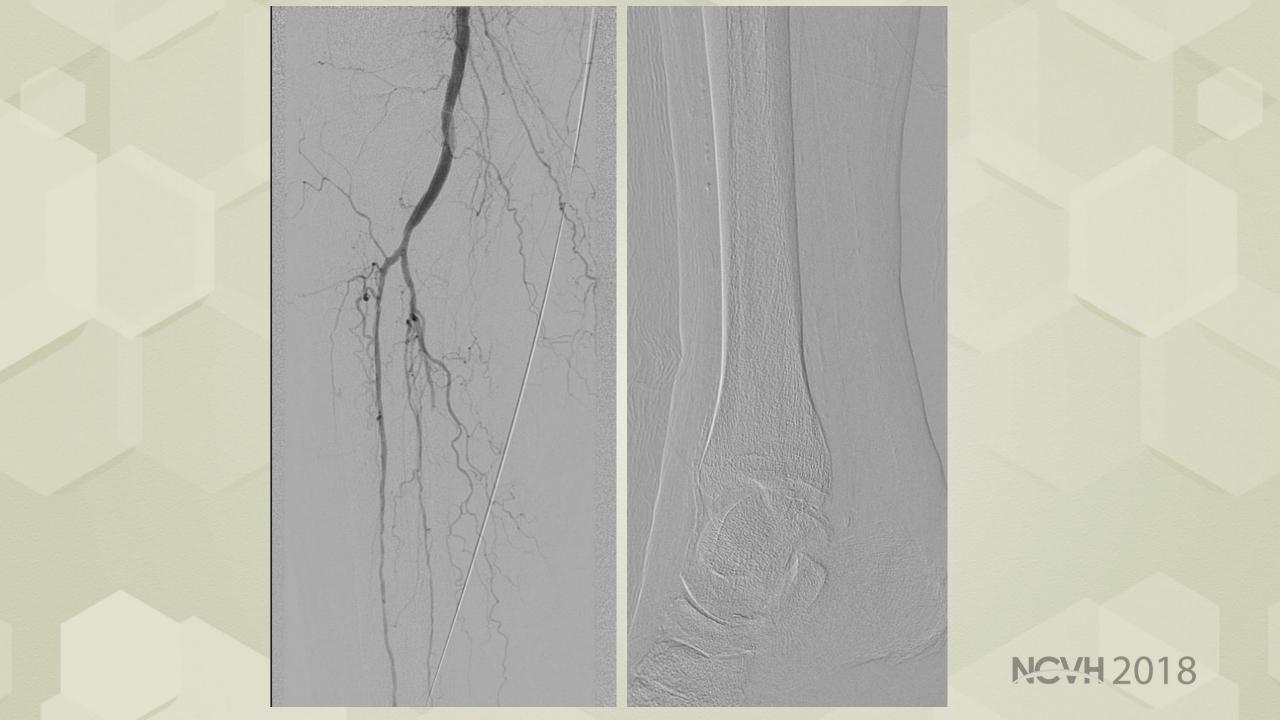












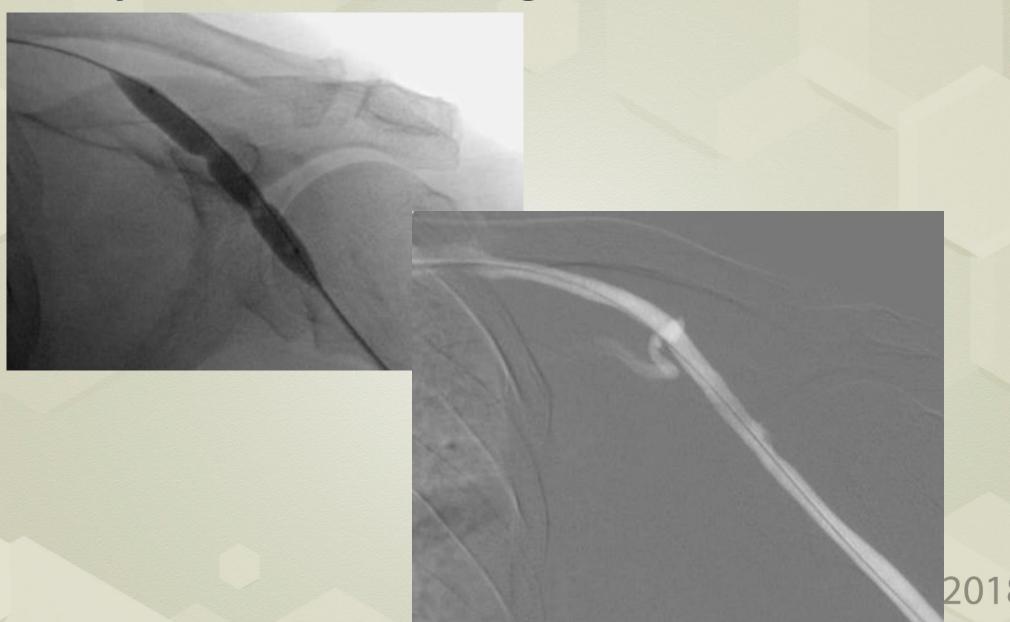
Dialysis access management



Dialysis access management



Dialysis access management



What else can we do?

- Other potential IR procedures
 - Percutaneous nephrostomy
 - TIPS revision
 - Diagnostic venograms/venous mapping
 - Other

Cost savings

- Theoretical, no proof yet
 - $100cc CO_2 = 3¢$
 - Omnipaque 300 ≈ \$10/50cc
 - Visipaque 320 ≈ \$36/100cc





Thank you

Use of Carbon Dioxide (CO₂) in the Office Interventional Suite

Bret N. Wiechmann, MD FSIR FAHA FSVM

Medical Director Vascular & interventional Physicians Gainesville, Florida, USA

Clinical Assistant Professor of Radiology University of Florida Gainesville, Florida



19th Annual Conference



