

An Endovascular solution for a Troubling Orthopedic Complication: Rapid Coil Embolization of a Profunda Branch Laceration During Complex Femoral Shaft Fracture Repair

Erin Moore, MD FACS FSVS RPVI

Director of Vascular and Endovascular Surgery

Chief of Cardiothoracic and Vascular Surgery

Baptist Medical Center, Jacksonville FL, USA

Disclosure

Speaker name:

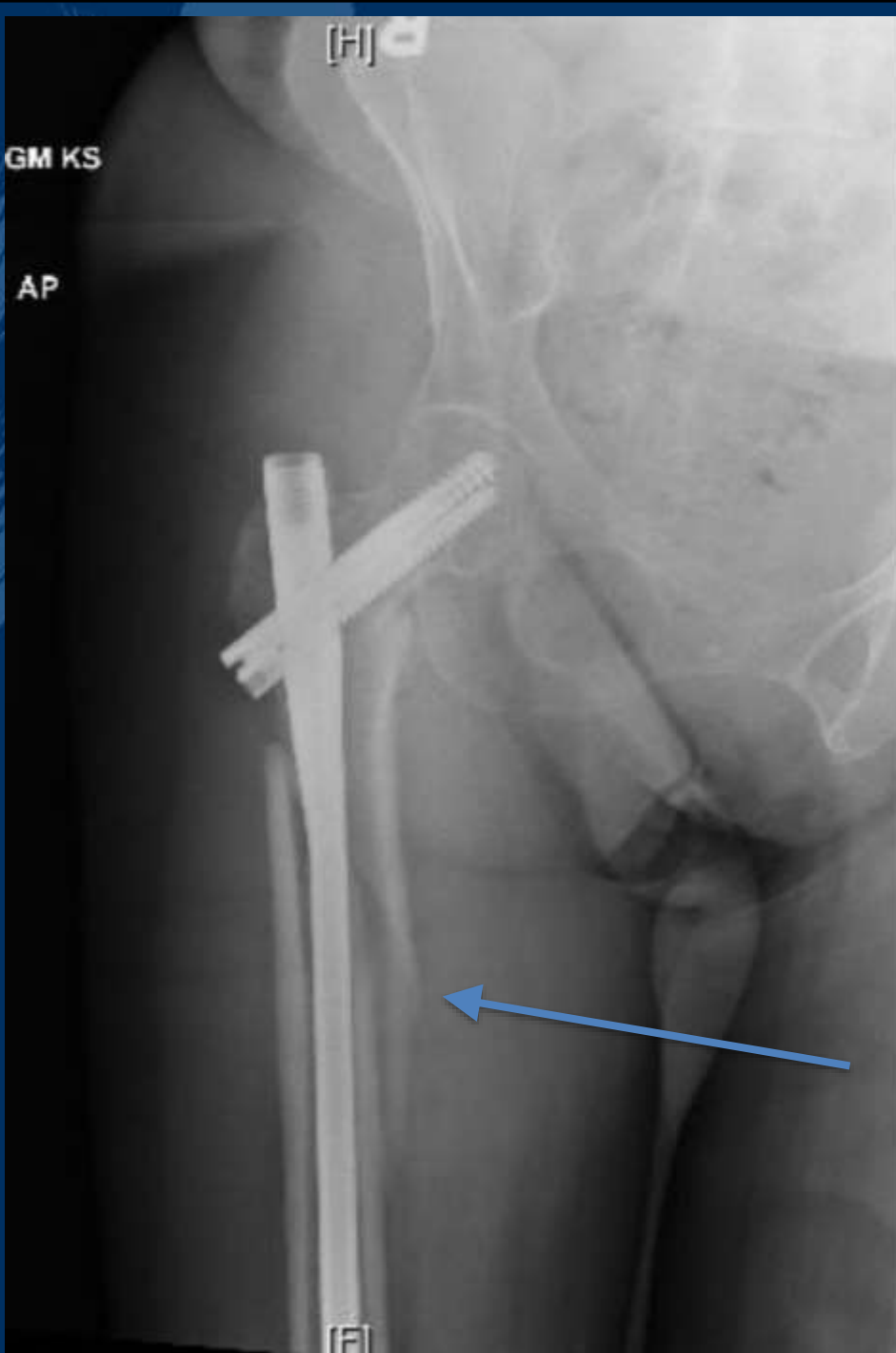
Erin Moore

I have the following potential conflicts of interest to report:

- Consulting, Terumo Vascular, Inc.
 - Employment in industry
 - Stockholder of a healthcare company
 - Owner of a healthcare company
 - Other(s)
-
- I do not have any potential conflict of interest

The Problem

- 59 yo institutionalized schizophrenic patient presented s/p fall on the right leg and hip, sustaining a complex spiral fracture of a previously rodded femur fracture
- Prior inter-trochanteric rod and femoral head screws are seen on X ray



The Problem

- 59 yo institutionalized schizophrenic patient presented s/p fall on the right leg and hip, sustaining a complex spiral fracture of a previously rodded femur
- Prior inter-trochanteric rod and femoral head screws are seen on X ray
- Repair was undertaken by the Orthopaedic specialist, to include wire/cable placement distally via a lateral approach to stabilize the entire shaft
- During circumferential wire wrapping of the proximal femur, significant bleeding started from the base of the incision

The Problem

- Two units of blood loss had already occurred at the time of intra-operative vascular consultation.
- On evaluation, significant bleeding emanated from the *medial* side of the femur, deep in the lateral incision.
- It was not possible to gain control of bleeding from this exposure

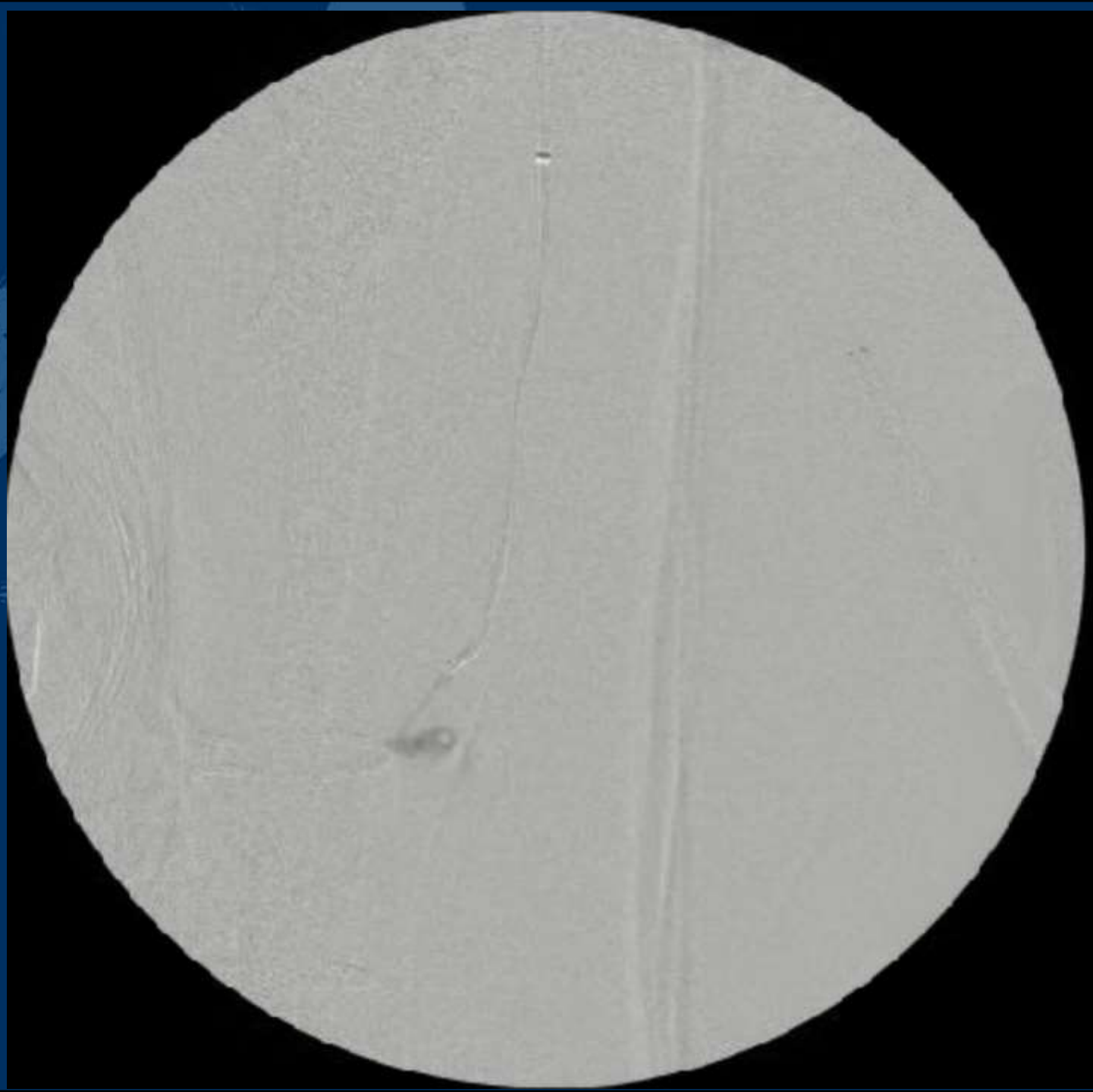
The Solution

- Immediate access was achieved under ultrasound guidance to the LEFT femoral artery
- Wire access over the aortic bifurcation with placement of a 6Fr, 45cm Terumo Pinnacle[©] sheath was quickly achieved
- Angiography from the Right Common Femoral level quickly identified extravasation from a branch of the Profunda Femoral artery



The Solution

- Selective cannulation of the profunda and into the distal branch quickly isolated the source

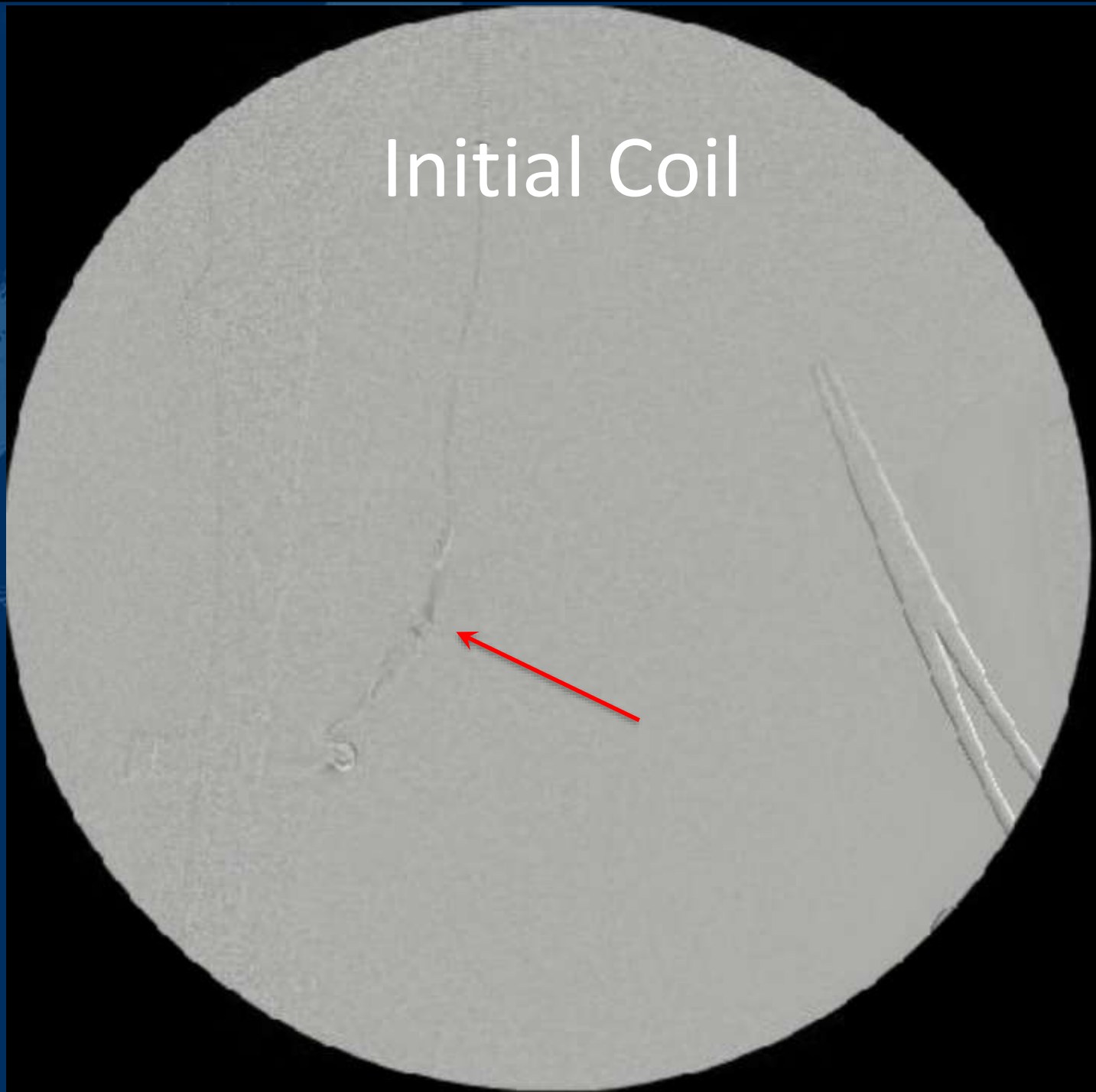


The Solution

- Selective cannulation of the profunda and into the distal branch quickly isolated the source
- Through a 4Fr Angled Glide Catheter, four Terumo .035 Azur[®] Hydrogel Coils were inserted into the hemorrhaging branch vessel



Initial Coil



Completion



Bleeding Happens...

- We are often called for urgent bleeding
- We're often "late to the party"
- Exposure is critical—but often not quickly achieved
- "Make the incision bigger" ... doesn't always work
- ***Never forget the Endovascular Option***
- Rapid Access and Proper Imaging is Key

An Endovascular solution for a Troubling Orthopedic Complication: Rapid Coil Embolization of a Profunda Branch Laceration During Complex Femoral Shaft Fracture Repair

Erin Moore, MD FACS FSVS RPVI

Director of Vascular and Endovascular Surgery

Chief of Cardiothoracic and Vascular Surgery

Baptist Medical Center, Jacksonville FL, USA