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

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Disclosure

Speaker name:
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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
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- 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.
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
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