ROLE & COMPARATIVE VALUE OF ALL ACCESS SITES AND ROUTES FOR LOWER EXTREMITY ENDOVASCULAR TREATMENTS: WHICH ARE BEST & WHEN?

Jihad A. Mustapha, MD, FACC, FSCAI
Clinical Associate Professor of Medicine
Michigan State University
College of Osteopathic Medicine
E. Lansing, MI

DISCLOSURES
Consultant to:
• Abbott Vascular
• Bard Peripheral Vascular
• Boston Scientific
• Cagent Vascular
• Cardiovascular Systems, Inc.
• Cook Medical
• Medtronic
• Spectranetics
• Terumo

ACCESS CHALLENGE FOR TIBIAL AND PEDAL INTERVENTIONS

Different Bodies But Similar Challenges

Therefore, for safe access ultrasound should be a primary frontline tool for access during tibial/pedal interventions.

CREATIVE ALTERNATIVE ACCESS IS A MUST
THE TAMI TECHNIQUE: ORIGINAL CASE SERIES

- Retrospective, single center case series recorded 23 patients who underwent TAMI revascularization.
- All patients had Rutherford Class IV-VI
- EVUS in all access

Results:
- arterial access was successful in all patients
- 92.5% average pre-stenosis
- 36 lesions were treated with 95% success rate
- No major complications noted


FACTORS TO CONSIDER WHILE PERFORMING RADIAL PVI

DIAGNOSTIC MEASURES IN PREPARATION FOR TP INTERVENTIONS

Most diagnostic radial angiograms:
- Radial artery to aortiiliac junction is approximately 120 cm
- Current available diagnostic catheters that are compatible with 5F sheaths have max length of 150 cm. This allows selective angiograms as far as the proximal SFA and profunda.
- All arterial segments between the radial artery and the common femoral artery are accessible with current diagnostic catheters.
- Current available endovascular-approved wires have a max range of 330 cm.

BEST VS OK

BEST: access for tibial–pedal intervention is antegrade CFA.
OK: access for tibial-pedal interventions in contralateral CFA.

**BEST VS OK**

**BEST:**
- allows tools to reach all target vessels.
- CTO crossing more effective

**OK:**
- challenges with all tools reaching target arteries
- CTO crossing more challenging

**BEST VS OK**

**BEST:**
- pedal loop reconstruction easily feasible.
- CART vs RCART, Re-BACK, RANDEVOUX all feasible

**OK:**
- pedal loop reconstruction not always feasible
- CART vs RCART, Re-BACK, RANDEVOUX not all feasible

**BEST VS OK**

**BEST:**
- antegrade-retrograde access and revascularization is possible with all tools.

**OK:**
- antegrade-retrograde access and revascularization is NOT possible with all tools

**BEST VS OK**

**BEST:**
- complication management very effective including coil and covered stents.

**OK:**
- complication management not as effective especially with coils and covered stents.