Ultrasound-guided, retrograde puncture of two tibial arteries to treat the embolic occlusion using the over-the-wire balloon catheter

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Disclosure

Speaker name: 

I have the following potential conflicts of interest to report:

- Consulting
- Employment in industry
- Stockholder of a healthcare company
- Owner of a healthcare company
- Other(s)

I do not have any potential conflict of interest
Acute Limb Ischemia

- **Acute limb ischemia** is any sudden decrease in limb perfusion causing a potential threat to limb viability.

- Patients with **embolism or traumatic occlusion** tend to present early (hours) due to lack of collaterals, extension of thrombus to arterial outflow.

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Immediate revascularization
Case

◆ 76 year-old male patient

◆ Brief history
  - Aug. 3, 2016. traffic accident during the motorcycle riding
    → headache, chest wall pain
    → emergent craniotomy due to the intracranial hemorrhage

  - Sep. 13, 2016. endoscopic bleeding control due to gastric ulcer bleeding

  - Sep. 17, 2016. transferred to the vascular surgery due to acute limb ischemia on left leg
Treatment options

- open thromboembolectomy

- thrombolysis

- aspiration thromboembolectomy

- rheolytic mechanical thrombectomy

- open and endovascular technique (hybrid surgery)
thromboembolectomy using 4F Fogarty balloon catheter
Embolectomy with 3F OTW Fogarty catheter
Step of US-guided distal puncture (another CTO patient)
1. find the target artery; presence of intima, compression, power Doppler
2. push the needle until the blood appears or double wall puncture
3. wire insertion
Summary

- Hybrid surgery; effective in acute limb ischemia
- Distal puncture can be an useful technique.
Thank you!