The Subclavian Artery Access for difficult vascular interventions

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Disclosure

Speaker name:
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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
1º case 2016

76 yo male
Former US Marine

Pancreatic cancer -> Whipple
Pseudoaneurysm hepatic artery

3 x coil embolisation of a growing pseudoaneurysm

Acute Bleeding

RR 40systolic, P 120/min

Tough guy:
“I’m prepared man. Just one favor:
If I don’t make it,
tell my wife I love her“

… he made it! Thanks to the subclavian artery access …
1. Ultrasound-guided puncture of the lateral, left-sided subclavian artery / medial axillary artery

Clavícula
Caput humeri

22.01.19 Enrique Alejandro Lafont
1. Ultrasound-guided puncture of the lateral, left-sided subclavian artery/medial axillary artery
2. Use of a 0.018" Terumo Advantage® Wire
3. Insert a 4F Sheath (0.025“/0.64mm)
4. Use a 0.035“ wire and e.g. MP4F catheter to access the abdominal aorta
5. Introduce the work sheath (e.g. 6F Destination® 0.038“/0.97 mm)
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5. Introduce the work sheath (e.g. 6F Destination® 0.038"/0.97 mm).
6. Perform intervention.
7. Ultrasound-guided closure of the puncture side with AngioSeal®.
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7. Ultrasound guided closure of the puncture side with AngioSeal®
73yo man
Lower Limb Amputation right
Rest Pain
Acute Occlusion iliac arteries right
Acute occlusion 7x7cm Aneurysm CFA right
Acute occlusion APF right
Massive calcification both iliac arteries
Lung Cancer
Unfit for surgery
73yo man
Lower Limb Amputation right
Rest Pain
Acute Occlusion iliac arteries right
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Experience

- 2-Center Experience with subclavian artery access
  (-> Dr. Daniel Palacios, UKGM Giessen 17 x subclavian access)

- Since 2016: 59 interventions:
  -> Bleedings, Endoleaks, CTO`s Upper/lower limb, CLI, ALI, chronic and acute Mesenteric Ischaemia, Aneurysms...

- Technical success rate of the access: 100%
- Interventional success rate: 100%

- Access Related complication rate: 3% (2 out of 59)
  1° case: 6F Sheath, Pseudoaneurysm (Starclose ®), polytraumatized 76yo successfully treated with thrombin injection
  2° case: 6F Sheath, Bleeding after 3 (!) days (AngioSeal®), end-stage cancer successfully treated with endograft (Viabahn)
Summery and Conclusion

The subclavian artery access is safe and feasible for all sorts of difficult arterial interventions and has many advantages to the femoral or radial access:

- Easy to puncture and safe to close
- No need for extra long devices compared to radial access
- Easy antegrade access of visceral and pelvic arteries
- Smoother angle compared to radial access
- Larger vessel diameter compared to radial access

✓ Better Stearability
✓ Less risk of dissection and ischemia
✓ Less (no) access vessel spasm
✓ Preserves radial artery
✓ One vessel run-off is no contraindication
✓ Safe up to 8F sheaths
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Thank You

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