CERAB for an Infrarenal Aortic Epithelioid Angiosarcoma causing Critical Limb Ischemia in a 80-year old Patient

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Disclosure

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
Case Presentation

- F, 80 years old
- 2-month history of critical limb ischemia
  - Rest pain
  - Bilateral feet lesions
- Significant weight loss (8 kg in 4 months)
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Pre-operative Angio-CT Scan
Case Discussion

Weight loss – oncologic disease?

Brain CT scan - negative

CA 15.3, 19.9, CEA - negative
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Brain CT scan - negative

CA 15.3, 19.9, CEA - negative

Iliac & femoral – embolisation?

TE echocardiography – negative

No thoracic aortic pathology
Hybrid Procedure – Embolectomy + CERAB

- Surgical exposure of femoral bifurcations
- Crossing the lesion with .035" guidewire
- Over-the-wire aortic and iliac limbs embolectomy (5.5F)
- Balloon inflation on contralateral limb to prevent distal embolisation (patent hypogastric artery)
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CERAB Deployment

- Bentley BeGraft Aortic 18x48mm
- Right side - Atrium ADVANTA V12 10x38mm
- Left side – Atrium ADVANTA V12 10x59mm
- Previously ABBOTT Absolute PRO (8x40mm) BMS across the right side hypogastric artery
Final Angiogram
Patient Discharge & Early Outcome

- No more rest pain
- Good quality of life
- Progressive healing of all lesions
Histological findings

- Epithelioid Aortic Angiosarcoma
- The immunohistochemical study showed positivity for
  - CD31,
  - ERG,
  - Fli-1,
  - Pooled cytokeratins,
  - CD34
- with a proliferation index (ki67) of 40%
Follow-UP CT Scan (3 months)

- Patency of CERAB and femoral bifurcations
- Residual pathology in SFA bilaterally
- No extravascular metastatic lesions
Aortic Angiosarcoma

- Extremely rare (1 case/M in US)
- It can be
  - Intraluminal
  - Intimal
  - Adventitial
- 40% cases involving aorta
- Often post-mortem diagnosis
- Misleading clinical conditions
- Extremely aggressive
- Poor life expectancy (<12 months)

Nakamura H, Acta Radiologica Open. 2021;10(12)
Bartolomé Sánchez, Alejandra et al. Journal of Vascular Surgery – CIT. 2023; 0(0)
Take Home Message

- Aortic angiosarcomas are rare and underdiagnosed entities because of their nonspecific clinical presentation
- Endovascular procedures may be favorable when open repair is not an option
- Primary Aortic tumors should always be considered
  - in case of unusual isolated aortic lesions in non-atherosclerotic patients or
  - in atherosclerotic patients when an oncologic pathology is suspected but not clinically evident.
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