Endovascular management of SMA branch aneurysm combined with AV fistula

- **Lukic B, Cvetic V, Colic M, Kecman N**

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Disclosure

Speaker name: 

Borivoje Lukic, MD

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)

- [x] I do not have any potential conflict of interest
Background

Visceral artery aneurysm (VAA)

- Incidence: SMA 5-8%
  - Jejunal (JA), ileal, colic 2%

- Clinical diagnosis is difficult and these aneurysms are in many cases discovered and diagnosed only after rupture.

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Background

• 2 Case series from the Cleveland Clinic and Mayo Clinic
  - 30-day mortality after elective treatment was 8.3%.
  - Patients presented with rupture operative mortality was 37.5%

• The authors concluded that SMA aneurysms pose an important risk of rupture and death, should be treated if the operative risk is low.

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Background

Visceral AV fistula

- Delayed presentation can occur up to 10 years after an initial injury.

- Symptoms:
  - mesenteric ischemia - diarrhea or abdominal pain
  - symptoms of portal hypertension including variceal bleeding

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Endovascular treatment of SMA aneurysm or pseudoaneurysm

- **COILS** – include the risk of distal embolization into the SMA, portal vein, or back into the aorta

- OTHER EMBOLIC AGENTS have been used, including cyanoacrylate and thrombin.

- **STENTS AND STENT-GRAFTS**

- Visceral AV fistulae (SMA-SMV in particular) – use of embolization coils and covered stents

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Case report

- 71 year old male, asymptomatic
- History of chronic hypertension
- No major injuries in last 10 years
- Underwent abdominal ultrasound that demonstrated an AAA (4.6 x 4.8 cm)
- Also further examination presented saccular aneurysm of jejunal artery (21 x 55 mm) combined with AV fistulae (JA-SMV)

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Pre-procedure DSA

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CT-Angio control after 8 weeks

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Conclusion

• 8 weeks after procedure control CT-angio shows no presence of aneurysm or fistulae.

• AFF graft patent

• Embolization of jejunal artery is gaining credence as a safe treatment with low incidences of complications and recurrence

• It has become the first-line treatment of SMA aneurysm and pseudoaneurysm
Thank you for your attention
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