Diagnosis and Treatment of Visceral Artery Occlusive Disease Before EVAR

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Disclosures

- None

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Ischemic Complications and EVAR

- Well recognized
  - Spinal Cord
  - Limb
  - Intestinal
  - Renal
- Outcomes can be devastating

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Mesenteric Ischemia

- Not very well studied
- Combination of
  - Low flow
  - Anatomic disruption
  - Embolization during the procedure

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Risk factors and outcomes for bowel ischemia after open and endovascular abdominal aortic aneurysm repair

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- Ruptured AAA
- Open repair
- Transperitoneal approach
- Supraceliac clamping
- IMA reimplantation
- Long operative time
- >1 U of blood transfusion

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Mesenteric Ischemia

- History of prior bowel surgery – that might interrupt collateral flow
- Preoperative Anatomic Assessment
  - Celiac
  - SMA
  - IMA
  - Hypogastric

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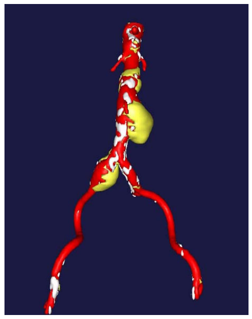
Case 1

- 88 year old female with Rectal CA and 5.5cm AAA and 3.6cm R CIAA.
- Underwent colon resection followed by plan for EVAR.



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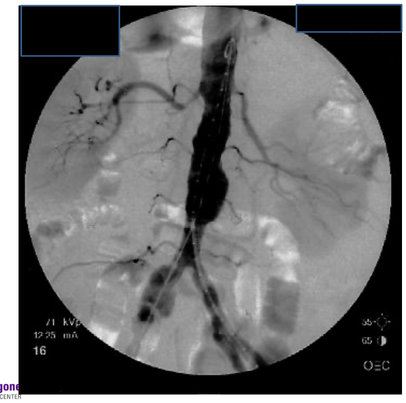

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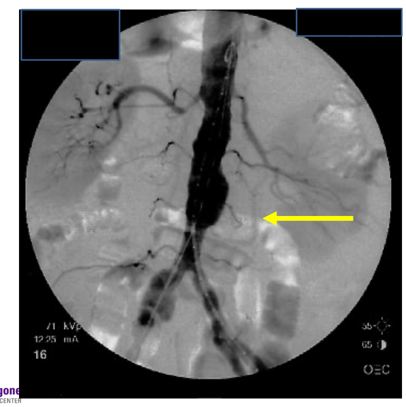

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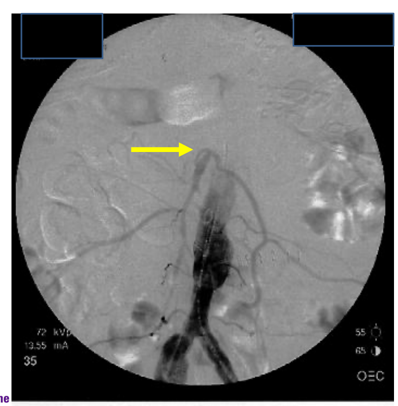

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Case 2

- 82 year old obese male
- 6.2cm AAA
- EF 25%
- Right Hypo occlusion and Left Hypo stenotic

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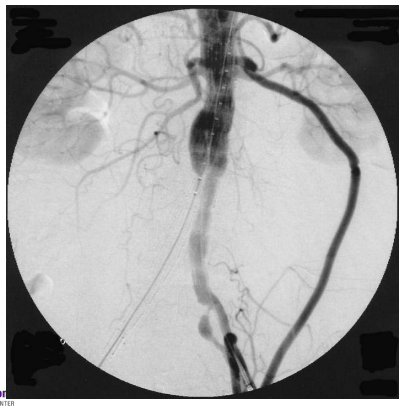

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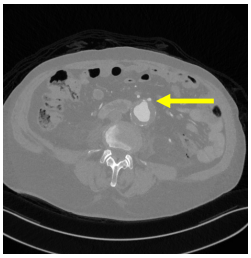
Case 3

- 72 year old with infrarenal AAA
- Large IMA
- Healthy and good risk



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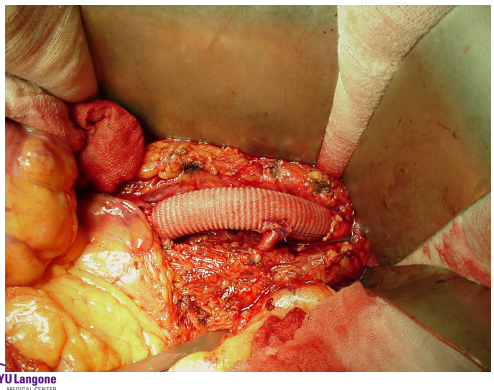

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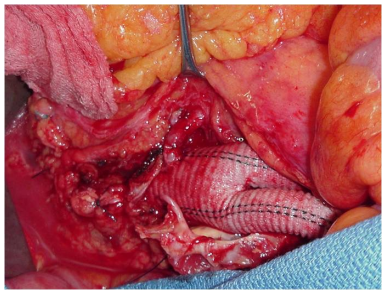
Case 4



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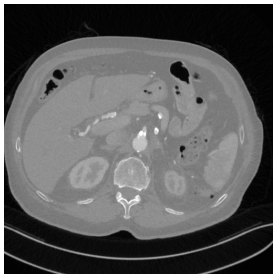
Case 5

- 78 year male with 5.5cm AAA
- Poor access
- CT with SMA stenosis



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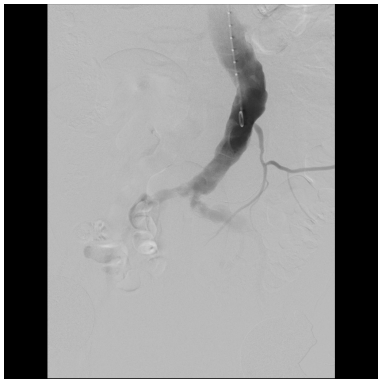

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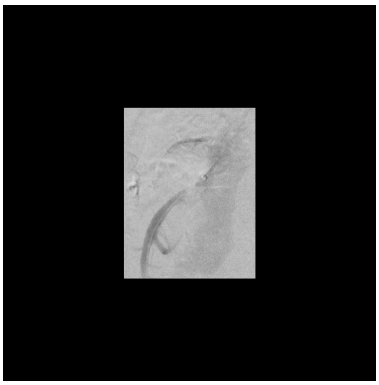

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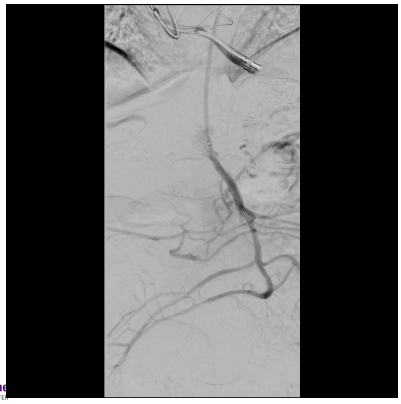

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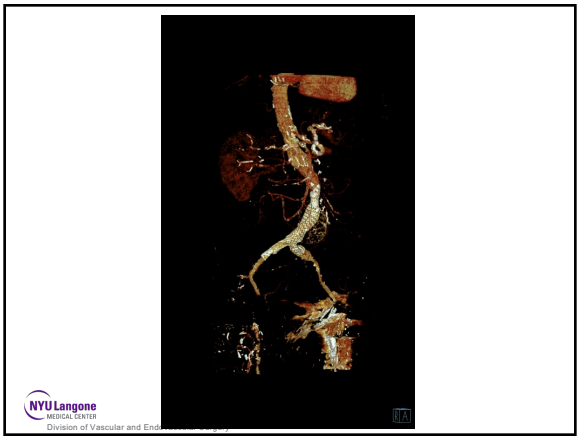
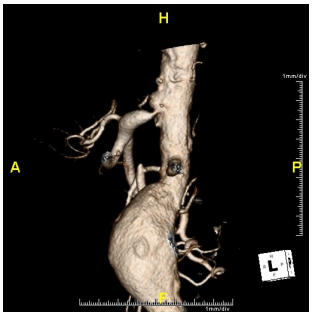
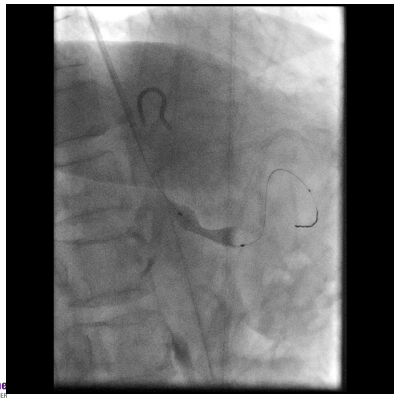
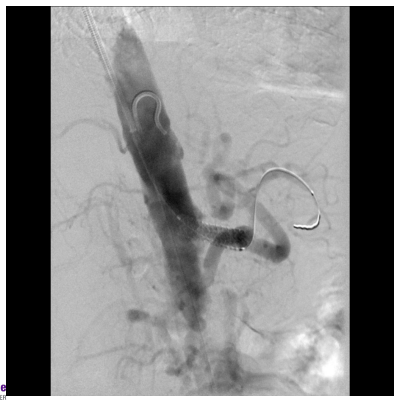


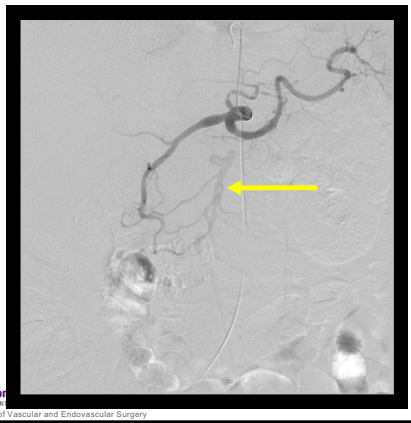
Case 6

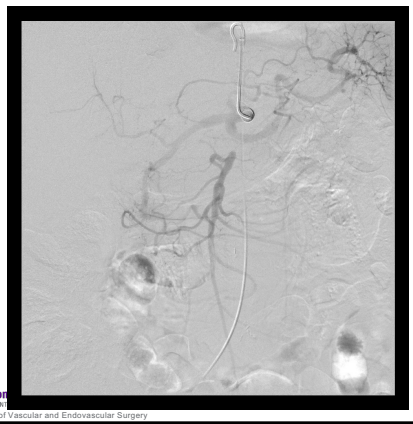
- Infrarenal AAA
- SMA occlusion
- Celiac stenosis

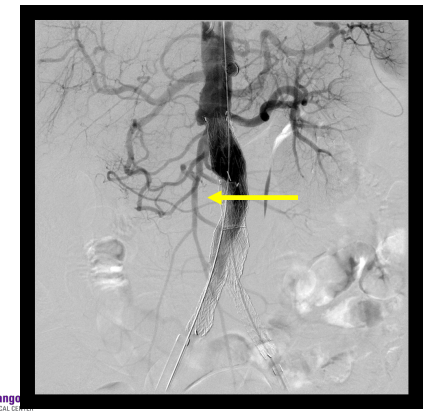












Approach to Management

- No Celiac/SMA disease and large (>5mm) patent IMA
  - Consider revascularizing the IMA
- Celiac/SMA disease with meandering mesenteric/patent IMA
  - Open mesenteric bypass
  - Endovascular stenting (retrograde option)
  - Consider open AAA repair
- Celiac/SMA disease and occluded IMA
  - Risk unclear
- Preserve hypogastric arteries

Conclusions

- Evaluating ALL vessels is critical
- Visceral & hypogastric artery occlusions can occur in patients with AAA
- IMA disease is the most commonly encountered and may require revascularization
- Celiac or SMA may need pre-EVAR revascularization

Thank You!