My worst case with a bad outcome – they happen to me to

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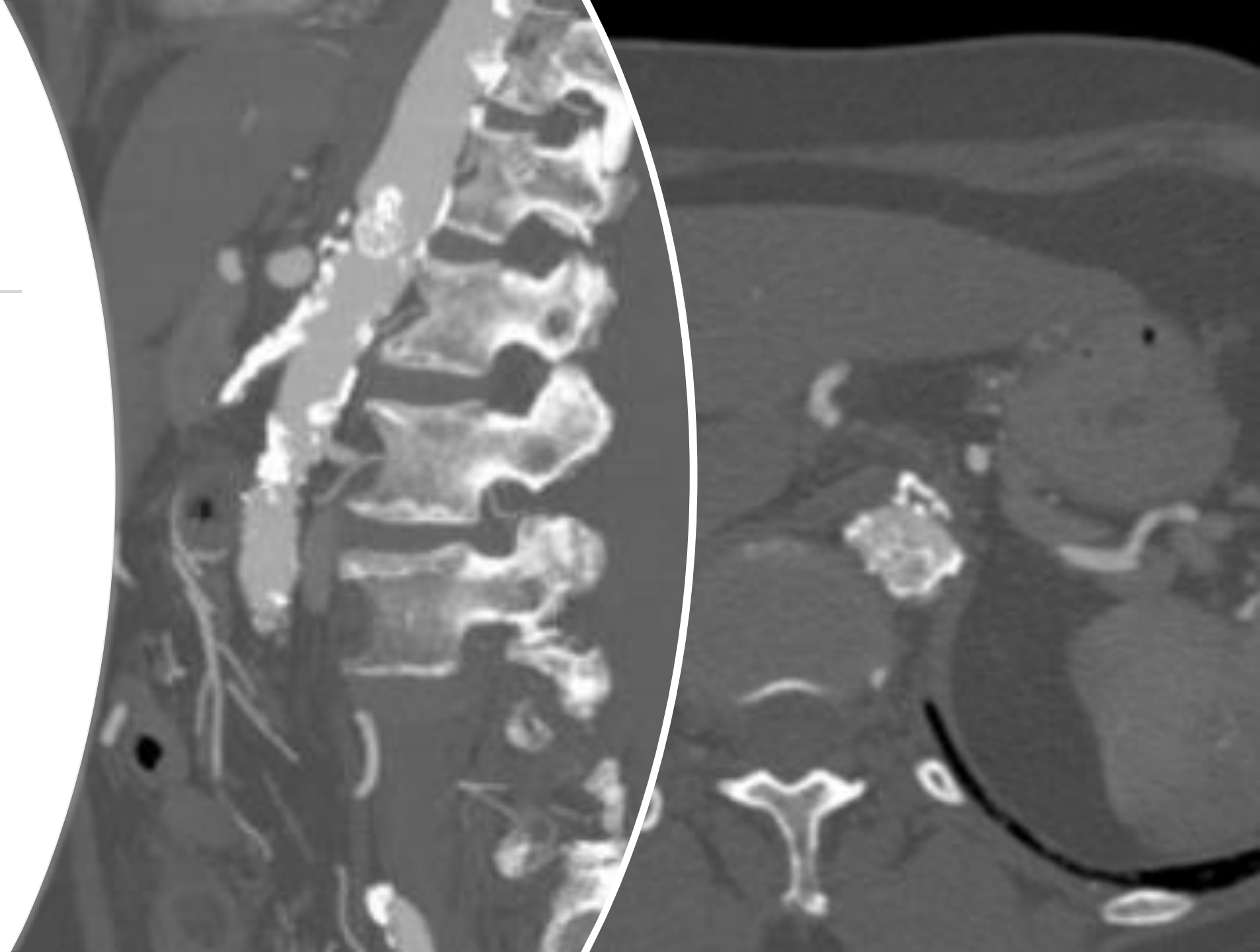
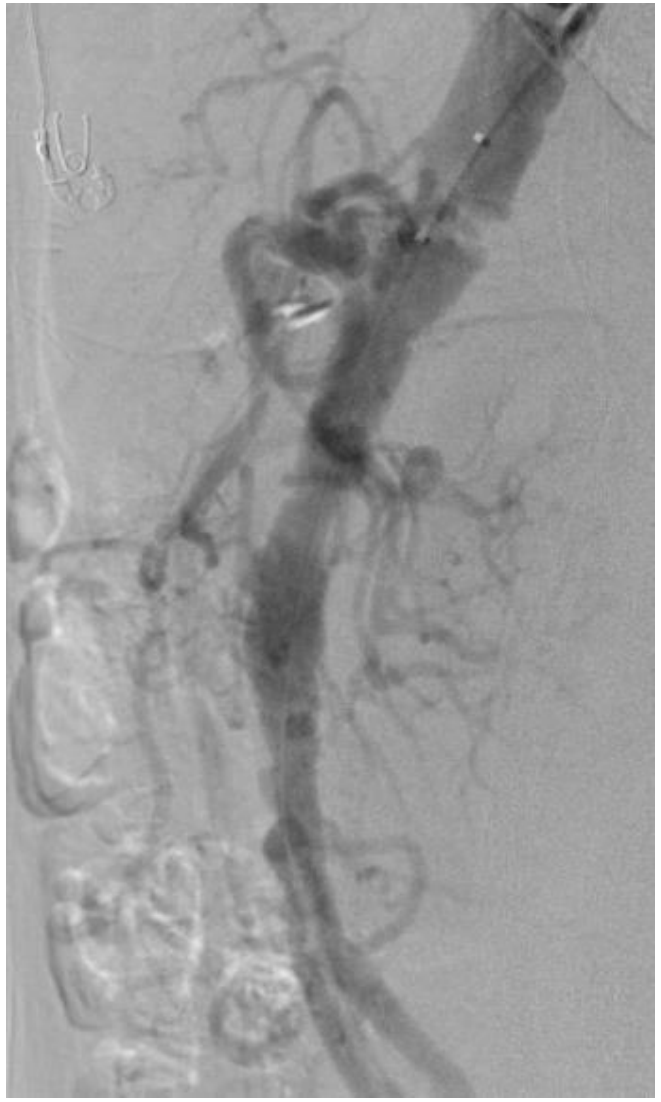
75yo - short distance claudication, 6mo of progressive post-prandial abd pain, 10# weight loss

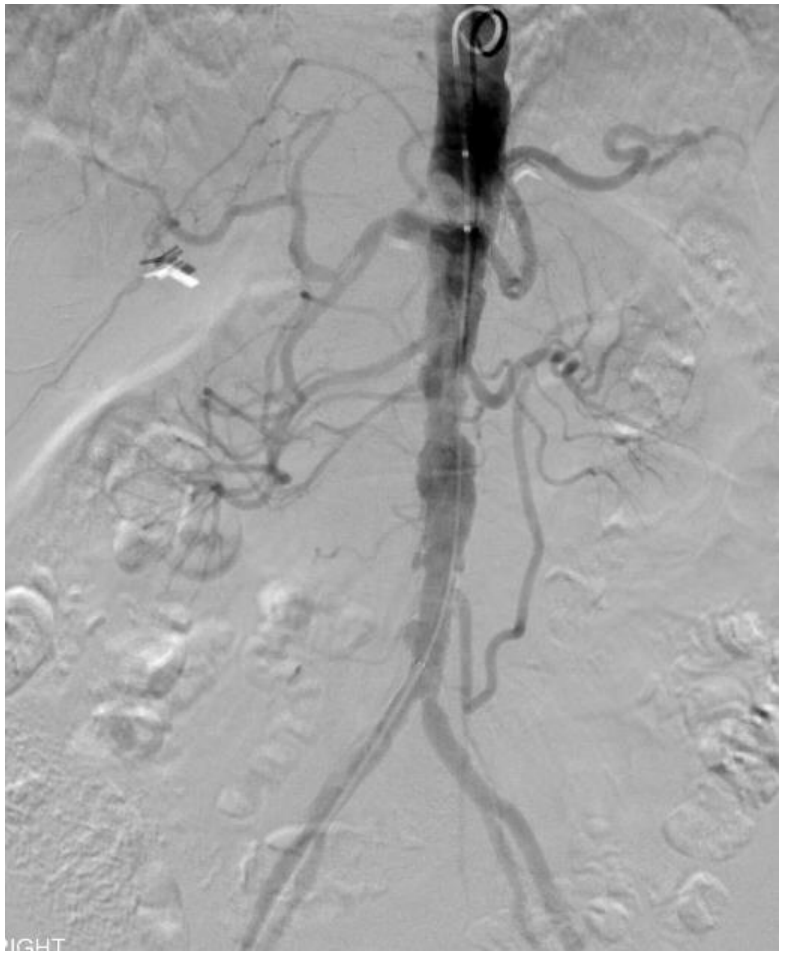
- PMH: PAD, HTN, HL, TIA, CAD, former smoker (34 pack-year)
- PSH: Lap cholecystectomy, RIH repair, RLE ‘vein stripping’, shoulder/knee surgeries
- Meds: ASA, Plavix, Pravastatin, Amlodipine, Zestoretic, Protonix
- FHx: Multiple – CAD/HTN/DM; Father with AAA
- Exam: 120s/50s; 56kg
- Non-palpable pedal pulses

Diagnostics

- ABIs
  - Monophasic / 0.5
- Mesenteric Duplex
  - Celiac – PSV 526
  - SMA – PSV 30s/blunted waveforms







Angiogram (Key Findings)”

Extensive supra-celiac aortic coral reef plaque

Widely patent celiac

Occluded SMA

Widely patent renal arteries

Diseased distal aorta

(30mmHg gradient)

What would you do now?

Aortic endarterectomy with PTFE patch aortoplasty through an 8th inter-costal thoracotomy and confluent retroperitoneal approach using a supra-celiac clamp

No pulse through the supra-celiac aorta palpable

Aorta clamped above the renal / mid-thoracic

Trap-door endarterectomy revealed near-occlusive coral reef plaque

Aortic endarterectomy with PTFE patch aortoplasty with 4-0 Prolene

32-min aortic cross-clamp / 50cc EBL

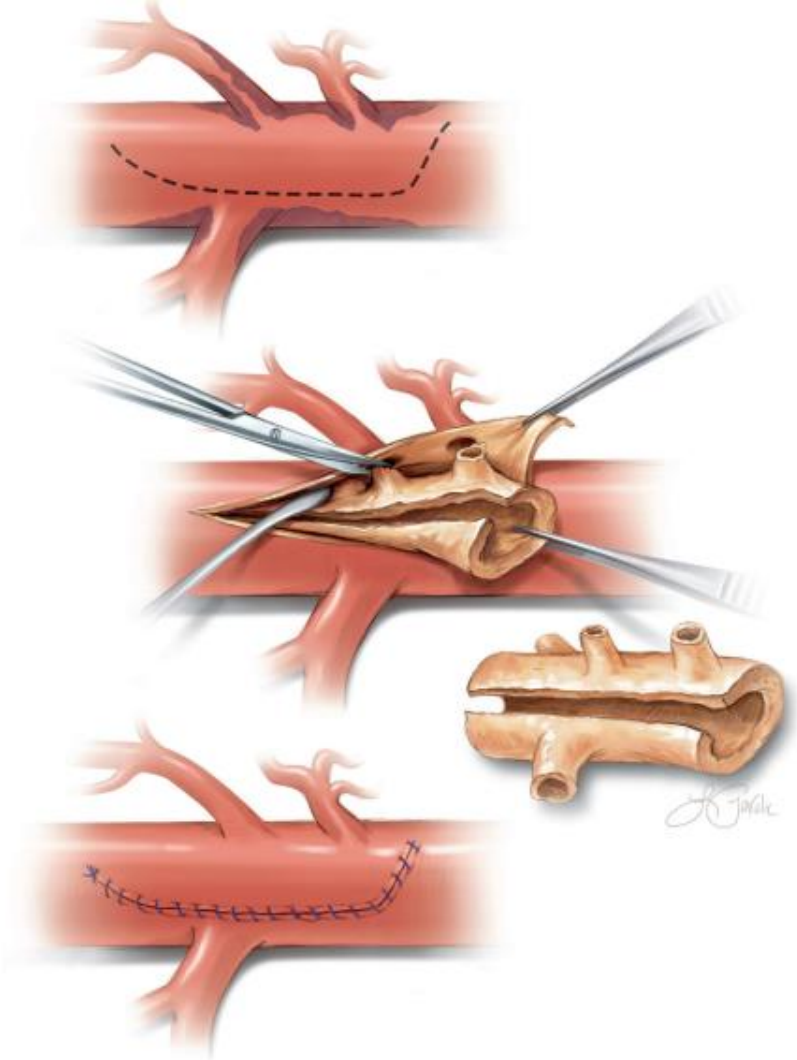


Figure 89.13 Endarterectomy of the aorta, celiac and superior mesenteric arteries through a longitudinal trapdoor aortotomy with primary closure.

Case Technically Went GREAT!

Operative Course (continued)…

- Post-reperfusion coagulopathy
- 5L EBL
- Progressive lactic acidosis (LA 10.6 / pH 7.03)
- Hyperkalemia (K+ 6)
- PEA Arrest
- Intra-cardiac thrombus
- On-table mortality

- While historically criticized for high mortality rates (up to 15%)
- Contemporary outcomes following open mesenteric bypass at high-volume centers support mortality rates <4%
- Open mesenteric revascularization boasts excellent symptom improvement (77% to 100%) with low recurrence rates at 3 to 5 years (0% to 32%) and perioperative morbidity rates approximating 35% to 40%

Table VII. Outcomes after open surgical revascularization for chronic mesenteric ischemia

First author	*Patients, No.*	*Vessels treated, No.*	*Endarterectomy, %*	*Complications, %*	*Operative mortality, %*	*Follow-up, months*	*Symptom recurrence, %*
Present series[a]	80	134	46	29	4	46	14
Kruger,[3] 2007	39	67	0	12	3	39	8
Atkins,[6] 2007	49	88	37	35	2	42	35
English,[7] 2004[a]	58	80	9	62	29	42	6
Cho,[8] 2002	25	41	41	60	11	60	41
Park,[4] 2002	98	179	5	NA	5	24	9
Jimenez,[9] 2002	47	92	0	35	11	31	9
Mateo,[10] 1999	85	130	22	33	8	36	24
McAfee,[11] 1992	58	119	8	36	10	40	12
Rapp,[12] 1986	67	111	70	21	8	50	8

[a]Includes patients with acute-on-chronic symptoms.

Reflections

- Acute on chronic symptoms pre-op
  - Possible dehydration
- Under-estimated frailty
- Birthday
- How would I manage a similar case?