

Gastroduodenal Aneurysms Associated With Celiac Artery Occlusion:
Patterns, Treatment, and Technical Tips To Maintain Flow Through
the Gastroduodenal And Results

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NO DISCLOSURES



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Introduction

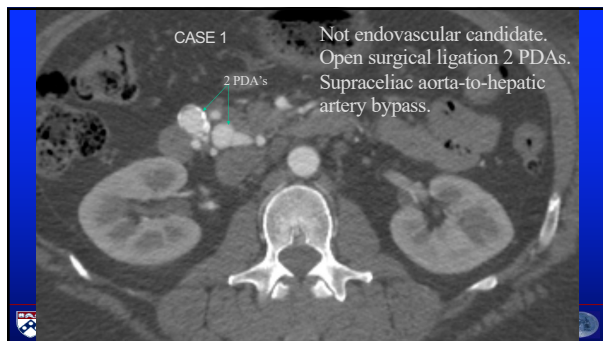
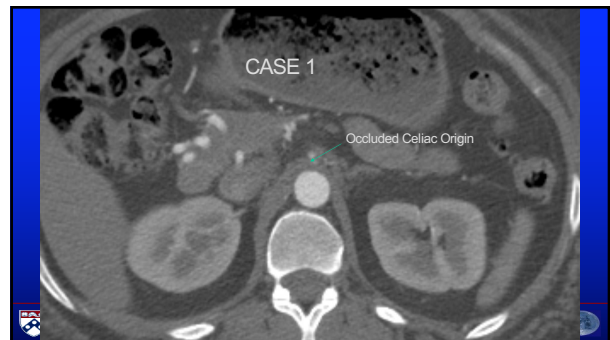
Gastroduodenal Aneurysm (GDA) =
Pancreaticoduodenal Aneurysm (PDA)

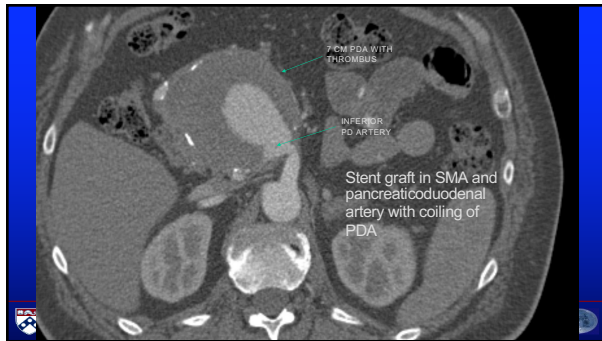
- * 2/3 associated with celiac artery stenosis/obstruction
- * high propensity for rupture at any size!

1992-2020: retrospective review of 8 cases



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CASE 3: OPERATIVE MANAGEMENT

- Attempted endovascular recanalization of celiac artery and coiling of PDA; however, unable to cross celiac occlusion
- Patient became unstable - open transabdominal exploration with ligation of PDA with preservation of GD artery

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| Patient | Presentation | Etiology | Procedure |
|-----------|---|-----------------------------------|--|
| Patient 1 | Flank pain (non-ruptured) | Celiac artery occlusion with MALS | Aorto- to-hepatic bypass w Dacron graft and resection of 2 PDA aneurysms |
| Patient 2 | Abdominal pain (non-ruptured) | Celiac artery stenosis with MALS | PDA coiling with SMA stent graft exclusion via brachial approach |
| Patient 3 | Abdominal pain (ruptured) | Celiac artery occlusion with MALS | Open ligation of PDA/GDA aneurysm |
| Patient 4 | Unstable Asymptomatic (incidental finding on F/U Onc imaging surveillance) | Replaced R hepatic artery | Open ligation of aneurysm; SMA-to- Hepatic bypass w Gelfoam graft |
| Patient 5 | Asymptomatic (Incidental finding on Chest CT for pulm symptoms) | Unclear etiology | PDA coil embolization via brachial artery approach |
| Patient 6 | Abdominal pain (ruptured) | Unclear etiology | PDA coil embolization with SMA stent graft via brachial approach |
| Patient 7 | Asymptomatic | Unclear etiology | Open inferior PDA aneurysm resection |

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PDA (pancreaticoduodenal aneurysm) =
GDA (gastroduodenal aneurysm)
4 Teaching Points

- 1) Any size should be repaired = propensity for rupture
- 2) Majority (2/3) of patients with PDAs have celiac artery occlusion or stenosis secondary to MALS
- 3) Endovascular Rx = first line option when possible
- 4) Selective revascularization: patients at high risk for ischemia if poor GD/PD artery collateral circulation - open bypass or stent graft maintain flow to hepatic artery

