

AB039. SOH22ABS137. Staged treatment for pancreaticoduodenal artery aneurysm with celiac artery revascularisation: case report and systematic review

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Background: Despite being rare, peripancreatic arteries aneurysms (PPAAs) carry a risk of rupture of up to 50%. PPAAs are frequently associated with Coeliac artery (CA) occlusion.

Methods: PubMed and Embase databases were searched using appropriate terms. The systematic review was conducted according to PRISMA guidelines.

Results: We present a case of a PPAA associated with CA occlusion, with a systematic review of PPAAs. Pre-operative angiography demonstrated that the pancreaticoduodenal artery was providing collateral blood supply to the liver. Treatment was staged hybrid intervention with aorto-hepatic bypass using 6 mm graft followed by coil embolization of the aneurysm. Two hundred and ninety-two publications were identified, with 81 publications included in the final review. One hundred and seventy-five of the cases (61%) were associated with CA disease either occlusion or stenosis. Abdominal pain was the main presentation in 158 cases. Rupture occurred in 111 (40%) of patients, while 10 cases were unstable on presentation. Fifty (18%) cases were detected incidentally while investigating another pathology. One hundred and forty-one (54.6%) cases were treated by coil embolization only, while 37 cases had open surgery. Twenty-one cases needed trans-arterial embolisation (TAE) and celiac stent.

Seventeen cases underwent hybrid treatment, while 16 cases had conservative treatment. In 26 cases treatment was not specified.

Conclusions: The scarcity in literature about true PPAAs associated with CA occlusive disease makes it difficult to assess the natural history or the appropriate treatment. However, embolization alone seems to be associated with higher ischemic foregut complications and Staged hybrid treatment with revascularization then TAE seems to be the safest treatment.

Keywords: Coeliac artery (CA); endovascular repair; hybrid repair; pancreaticoduodenal artery aneurysm; systematic review

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Footnote

Conflicts of Interest: The authors have no conflicts of interest to declare.

Ethical Statement: The authors are accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

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