Unusual Case of a Pseudoaneurysm in a Replaced Common Hepatic Artery Arising from Superior Mesenteric Artery

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INTRODUCTION

Hepatic artery variations are quite common in literature. However Common hepatic artery originating from the superior mesenteric artery is rare. It can get injured during hepatobiliary and gastrointestinal surgeries leading to formation of a pseudoaneurysm. Preoperative knowledge of variant anatomy is thus a necessity. Computed Tomography (CT) Angiography is the modality of choice to diagnose pseudoaneurysm. Coil embolisation is the treatment of choice for pseudoaneurysm.

CASE REPORT

69 year old Male patient who is a known hypertensive, diabetic with past history of biliary stenting and surgical biliary exploration presented with melena and blood in abdominal drain since 3 days. An emergency CT scan revealed a pseudoaneurysm in the replaced common hepatic artery originating from the superior mesenteric artery. The artery with the pseudoaneurysm was coil embolised and the patient was discharged in stable condition with no active evidence of bleeding.

Conclusion: Common hepatic artery can originate from superior mesenteric artery and can get injured during biliary surgery. Performing CT Angiography of the abdomen will lead to a quick and prompt diagnosis . Coil embolisation of the pseudoaneurysm is the first line of management in such cases.

Keywords: Common Hepatic Artery, Pseudoaneurysm, Coil Embolisation.
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**DISCUSSION**

Vascular complications following biliary surgeries are rare. They usually present with hemobilia and melena. Most of the vascular complications in the laparoscopic cholecystectomy involve the right hepatic artery. Common hepatic artery injury following biliary surgeries are rare. A replaced common hepatic artery arising from superior mesenteric artery is a rare anatomical variation with incidence ranging from 0.4% to 4.5%. It is known as hepaticomesenteric trunk. In our case replaced common hepatic artery is arising from superior mesenteric artery from its posterior aspect. It is coursing between pancreas and inferior vena cava for a short segment and is then directed anteriorly in the pancreaticoduodenal groove before bifurcating into right and left hepatic artery. Common hepatic artery is in close relation to common bile duct in its distal segment. Injury to the replaced common hepatic artery originating from superior mesenteric artery and presenting as pseudoaneurysm is infrequent in literature. The pseudoaneurysm in our case was arising just before bifurcation of the common hepatic artery in the hepatic artery proper. The gastroduodenal artery was proximal to the aneurysm. The Initial investigation of choice to diagnose pseudoaneurysm is computed tomography angiography. However catheter angiography remains the gold standard. The first line management in hepatic artery pseudoaneurysms is Trans arterial coil embolisation. If there is failure of coil embolisation surgery must be done. In our case we used four angiographic coils to successfully block the hepatic artery proper segment of the replaced common hepatic artery distal to the gastroduodenal artery.

**CONCLUSION**

Common hepatic artery can originate from superior mesenteric artery and can get injured during biliary surgery. CT Angiography of the abdomen will lead to a quick and prompt diagnosis. Coil embolisation of the pseudoaneurysm is the first line management in such cases.

**REFERENCES**


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