

Fontan Liver Disease Associated Splenic Aneurysms



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Introduction:

The Fontan procedure results in liver fibrosis in all recipients and can result in many disastrous complications. Here we present a patient with hemoperitoneum from a splenic artery pseudoaneurysm.

Case:

A 25 year old female with a history of a hypoplastic left heart status post Fontan Procedure, Atrial Flutter on rivaroxaban, cirrhosis complicated by downhill varices presented to the hospital with diffuse crampy abdominal pain. She initially attributed her symptoms to constipation, however her symptoms did not resolve after she took stool softeners which resulted in a bowel movement. Patient underwent a CT Abdomen Pelvis at an outside hospital which showed a 5.9 cm left cystic ovarian mass with concern for active hemorrhage due to surrounding fluid. On transfer, she underwent a CT Angiogram of the Abdomen and Pelvis which was notable for increased hemoperitoneum as well as a "3.5 cm pseudoaneurysm arising from the proximal aspect of the splenic artery." This was thought to be the source of the hemoperitoneum. Patient subsequently underwent embolization of the mid splenic artery with a 10mm amplatzer plug, embolization of the splenic artery aneurysm with concerto detachable coils and embolization of the proximal splenic artery with a 12mm amplatzer plug.

Discussion:

Patient's who have undergone the Fontan procedure have universal development of liver fibrosis. Splenic artery pseudoaneurysms are an extremely rare entity and are typically associated with chronic pancreatitis, although can be associated with trauma, post-operative complications and peptic ulcer disease. Fontan associated liver disease has been reported to be associated with splenic artery aneurysms in only one other case report. This can be a potentially fatal complication.

References

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