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Severe abdominal pain in a Jehovah's Witness patient

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Case presentation

A 76-year-old lady, with past medical history of hypertension, presented to the hospital with complains of severe right upper abdominal pain for 6 days prior to admission. A complete laboratory evaluation was non-revealing. An emergency computed tomography (CT) scan of the abdomen and pelvis revealed a hepatic artery aneurysm measuring 4 x 4 x 6 cm with unstable appearance (**Figures 1,2,3**). As the patient was a Jehovah's Witness, and was not going to consent to receive any blood or blood product transfusion if needed, she was taken to the angiography suite emergently where a hepatic artery angiogram was performed. This was followed by embolization with an 8 mm coil, with successful reduction in the size of the aneurysm.

Discussion

The recognition of hepatic artery aneurysms (HAA) has increased over the past few decades due to greater number of imaging studies being done. (1) HAA are the fourth most common abdominal aneurysms after aortic, iliac and splenic. (2) It comprises 5% of all aneurysms. (3) The classic triad of HAA comprises of abdominal pain, hemobilia, and obstructive jaundice. (2) Our patient was unique in that she presented only with abdominal pain and no liver function abnormalities. The vast majority of HAAs are small and asymptomatic. They are usually found incidentally when looking for other intra-abdominal pathologies. When they become unstable and rupture, they carry a mortality of approximately 40%. (3) Our patient was particularly challenging as, due to her religious beliefs, would not allow for blood transfusions, if needed. For that reason, coiling was opted as a therapeutic option. Transcatheter embolization is effective and carries a low mortality rate. (4) Our patient did well with this therapeutic intervention without complications.

Key words: Hepatic artery aneurysm, embolization, vessel coiling.

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Figure 1. Computed tomography (CT) scan of abdomen and pelvis without intravenous contrast reveals a large hypodense area of 4 x 4 x 6 cm with additional multiple small hypodense areas consistent with a possible cyst

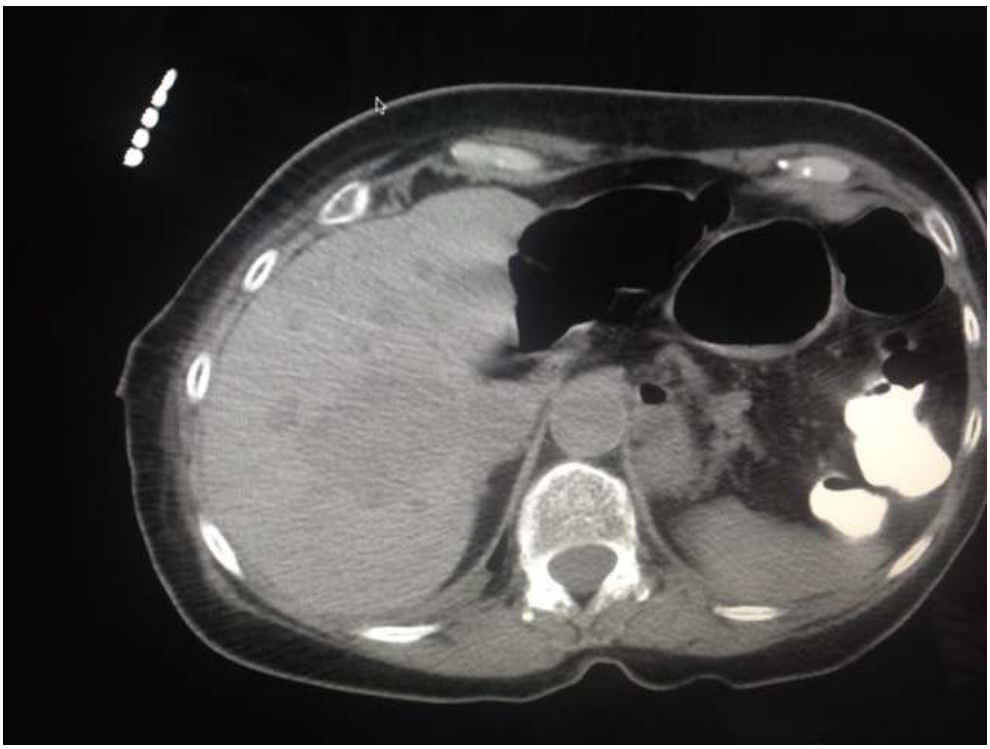
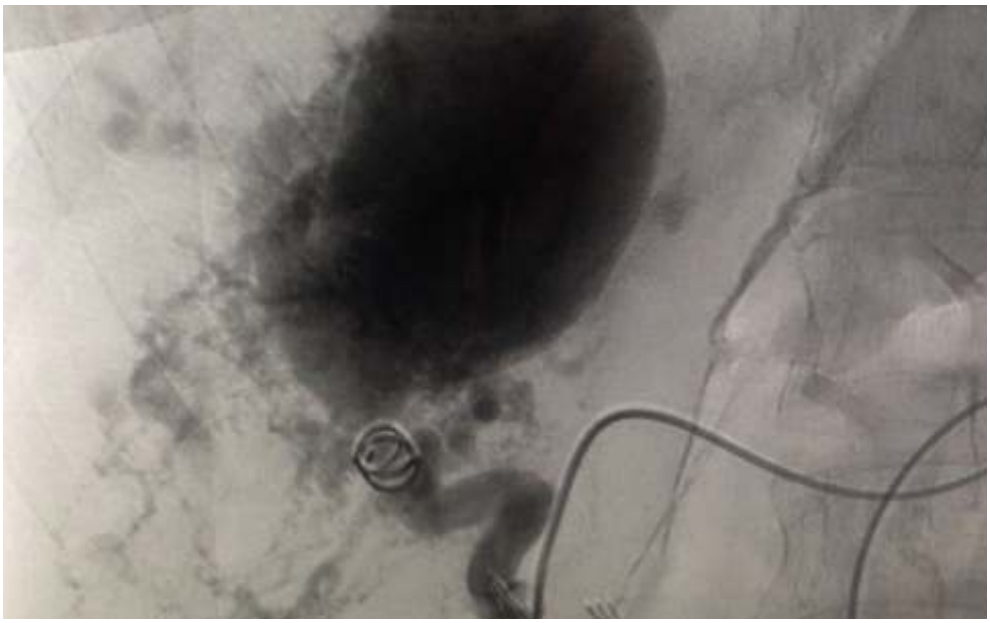


Figure 2. CT scan of abdomen and pelvis with intravenous contrast shows a right hepatic vascular malformation measuring 4 x 4 x 6 cm, with hyper vascularity, consistent with an hepatic artery aneurysm

Figure 3. Angiography reveals an 8 mm coil in the hepatic artery



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