Case	(092) First branch superior mesenteric artery pseudoaneurysm as the cause of hemobilia in a patient with burkitt linfoma
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CASE PRESENTATION

A 60 year-old male patient with a previous history of gastric Burkitt linfoma, with a mass affecting the porta hepatis with obstruction of the common bile duct(CBD) treated with percutaneous biliary drainage and chemotherapy for a long time; presented to the emergency department because of sudden loose of consciousness and subsequent fall.

He referred abdominal pain and the presence of blood in the drain bag. He was tachycardic and had a 9.7mg/dl Hb and a 4mg/dl total-billirubin.An abdominal contrast-enhanced-CT was performed and showed an expanded CBD with dense content due to hemobilia. In the distal third of the CBD a rounded high density image was seen and was reported as choledocolitiasis. After two days the patient became hypotensive, and a new CT was done.

The rounded dense image in the CBD was absent in the non-contras-CT and was only visualized in the contrast-enhanced-CT. It had increased in size and checking more carefully there was vessel that communicated the lesion with the superior mesenteric artey (SMA). Findings were compatible with a pseudoaneurysm (PA) of the first branch of the SMA.

Endovascular embolization was done and intrabiliary drainage of the bile duct. The patient responded well to treatment and decreased bilirrubin levels.

DISCUSSION

Visceral arteries pseudoaneurysms(VAPAs) are very uncommon and first branch SMA PAs are extremely rare. VAPAs have a higher risk of rupture than true aneurysm and a high morbility and mortality.

The key imaging findings are: a rounded hypoattenuating image in the nonenhanced -CT and hyperattenuating in contrast-enhanced-CT with a communication with a vessel.

The preferred treatment is endovascular embolization. In this in this case the prolonged presence of the biliary drainage catheter in the CBD, caused erosion of the posterior wall and the first branch of SMA causing the pseudoaneurysm.

CONCLUSION

Although VAPAs are an extremely rare cause of hemobilia and intraabdominal bleeding, we must have them in mind when looking for a cause of bleeding. Their early diagnosis and treatment by the radiologist is critical because they have a high risk of rupture and can be fatal.

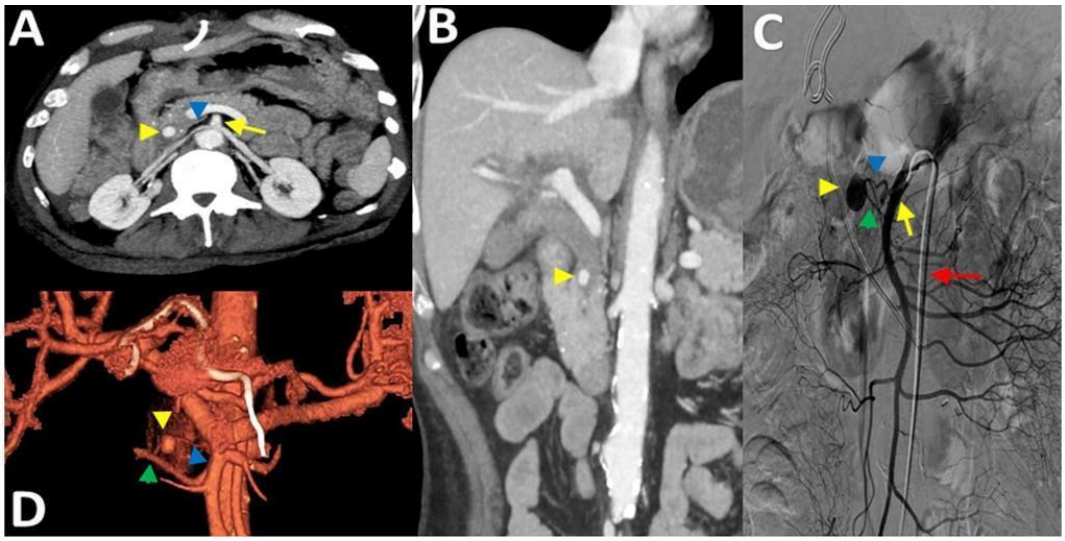

Figure 1: A) Axial contrast enhanced CT shows an expanded CBD with a high density rounded image (yellow arrowhead) compatible with a pseudoaneurysm, the first branch of the SMA (blue arrowhead) going to the pseudoaneurysm is also noted. The yellow arrow shows the SMA. **B)** Coronal reconstruction shows the pseudoaneurysm (yellow arrowhead) in the distal CBD. **C)** Digital angiography shows communication between the pseudoaneurysm (yellow arrowhead) with the first branch of the SMA (blue arrowhead) and a branch of the gastroduodenal artery (green arrowhead). SMA (yellow arrow) and the catheter (red arrow) in the abdominal aorta and the origin of the SMA are also noted **D)** 3D CT reconstrucction shows the same findings as in C.

BIBLIOGRAPHY

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