

## Portal Vein Aneurysm: A Case-Report. An Observation and Literature Review

R Berraida\*, I Elkoti, T Addajou, K Loubaris, S Jamal, H Seddik and A Benkirane

Gastroenterology Department II, Military Hospital Mohamed V, Rabat, Morocco

\*Corresponding Author: R Berraida, Gastroenterology Department II, Military Hospital Mohamed V, Rabat, Morocco.

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### Abstract

Venous aneurysms doors are rare and usually accidental discovery on abdominal imaging. Although most are asymptomatic, they can cause symptoms of compression of a nearby structure, thrombosis or bleeding. Treatment is usually not necessary and simple monitoring is suggested. We present a case of a patient who has a 3.9 cm aneurysm.

This is a 65-year-old patient with no particular ATCD who consults for typical abdominal pain of gravity in the left hypochondria. Abdominal ultrasound objectified a splenomegaly with an aneurysm of the portal vein.

**Keywords:** Bezoar; Stomach; FOGD; Surgery

### Introduction

Venous aneurysms doors are rare and usually accidental discovery on abdominal imaging. Although most are asymptomatic, they can cause symptoms of compression of a nearby structure, thrombosis or bleeding.

### Case Report

This is a 65-year-old patient without any particular ATCD who consults for abdominal pain in the left hypochondrium type of gravity, an abdominal ultrasound was performed, revealing a liver mass consistent with an aneurysm and a huge splenomegaly.

An angioscanner was requested and he confirmed the diagnosis, it was a trunk aneurysm measuring 39 -34 mm, with no image of wall thrombus (Figure 1 and 2).



Figure 1



Figure 2

Faced with the absence of complications of this aneurysm, a surgical abstention was decided under the guise of regular monitoring every six months by Doppler ultrasound. With more than three years of hindsight, the patient had no clinical disorder; and no evolutionary signs of her stable-sized aneurysm, with no image of wall thrombus.

### Discussion and Conclusion

The definition of the AVP is not very precise. Ohnami., *et al.* [3] simply retain a dilation vein carries beyond normal limits. For Novello., *et al.* [2] the diameter of the vein carries measured in the corpse ranges from 6.4 to 12 mm, while this diameter varies from 15 to 19 mm in the subject when measured in ultrasound. Our patient had an aneurysm of 43 - 22 mm. This rarity seems to us to justify the presentation of our observation.

In 1991, approximately 18 patients with extrahepatic PVA were reported. Their ages ranged from 5 to 51 years.

Since then, approximately 36 cases of PVA have been reported, including 12 extrahepatics. Venous aneurysms occur most often in the pop literate, jugular and saphene regions and less often in the femoral veins, forearms and portal veins. Most venous aneurysms are not life-threatening; however, poplity venous aneurysms are known for their propensity to thrombosis and cause pulmonary embolization.

All ages may be affected, with observations reported in the fetus [4], the newborn [5], the five-year-old [6] and the old man [7]. In the literature observations the median age is 53 years, with extremes ranging from newborn to 87 years [5,7]. Women are more affected than men, a study that was published on 56 cases, there were 34 cases of women for 22 cases for men or a sex ration of 1.5.

The discovery of aneurysm is often coincidental, on the occasion of abdominal pain, digestive hemorrhage HTP-related jaundice. The inaugural rupture is exceptional and deadly [1,7,8].

Diagnosis can be made by an ultrasound coupled with the Doppler color, or by an arteriography of the celiac trunk and the upper mesenteric artery, showing the exact anatomical situation of the aneurysm on the trunk of the vein or its branches [2,3,7,9]. The helical scanner and MRI give high-quality images [10,11].

Extra-hepatic localization is more common (60%) intra-hepatic location at the branches of the door vein (40%) [4,6,9,12,13].

The etiopathogenesis of AVP is not elucidated. A congenital cause was implicated [2,8]. A malformative origin could be invoked in a case on a dolichoveine [4]. Predisposing factors such as portal hypertension (HTP), chronic liver disease or cirrhosis [2,3,9] are found in more than half of cases of extra-hepatic AVP and in almost two-thirds of cases of intra-hepatic AVP.

HTP can also be the consequence of aneurysm in case of thrombosis, resulting in haemorrhage rupture of esophageal varicose veins [12]. Similarly, cirrhosis could also be the consequence aneurysm that compresses the bile ducts by its size, resulting in secondary bile cirrhosis.

PVAs can also be complicated by rupture, likely favored by HTP. Two cases of Inaugural fatal rupture [1,7] and a case of portacaval shunt with encephalopathy have been reported [14].

The treatment of AVP boils down to abstention for the majority of authors because of the surgical risk [2,3,7,15]. Four out of 60 cases were treated surgically [7,8]. Treatment was:

- Or in an aneurysm raphi reduces the size of the aneurysm by a partial resection of its wall, with a favorable evolution in the absence of HTP [7];
- Or a distal spleen renal bypass with splenectomy in the presence of HTP [1,3,7,8] with high surgical mortality.

In our patient, we opted for regular clinical and ultrasound monitoring, given the vagueness of her symptomatology, her age (65 years), the absence of complications. In case of a significant increase in the volume of aneurysm, or thrombosis.

Abstentionist attitude would have to be reconsidered.

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