Title: Portal vein embolization with Squid.

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Primary and secondary malignant liver tumors have an incidence and prevalence that has increased in recent years. Whenever possible, surgery is the treatment of choice. More than 70% of tumors are not initially susceptible to liver resection because the hepatic remnant could be too small and would not guarantee an adequate liver functional reserve.

Portal embolization is used to increase the volume of normal liver tissue before surgical resection in patients with an insufficient liver remnant.

Portal embolization is recommended when the liver remnant is:
- <20% in a normal liver
- <30% in a pre-treated liver with more than three months of chemotherapy
- <40% in a cirrhotic liver
Clinical case:
A 62-year-old woman is referred to our hospital in the presence of a liver lesion to be evaluated by the Surgery Department.
Abdominal CT in arterial and portal phase.
Hepatic lesion in segments V and IV of 13.3 X 6.6 X 8.9 cm (APxTxL) with lobed and partially delimited edges. In segment V it shows a large necrotic central area.
**Hepatic MRI.**
Primary hepatic tumor that in T2 sequences is moderately hyperintense and heterogeneous. It does not contain intrallesional fat and presents hyper signal with high b factors that shows restriction. It partially infiltrates the vesicular wall.

A liver biopsy confirms the diagnosis of cholangiocarcinoma.
Embolization of the right or left portal vein branches produces atrophy of the ipsilateral hepatic lobe and hypertrophy of the contralateral hepatic lobe.

Right portal embolization is more frequent since it is more frequent that tumors settle in the right hepatic lobe due to its larger size compared to the left.

Generally, an ipsilateral transhepatic approach with ultrasound and fluoroscopy control is used.

In our patient prior to right hepatectomy, a right percutaneous approach was chosen to embolize the right portal vein. An SOS Omni catheter (AngioDynamics) was used to catheterize the right portal vein and coaxially a Progreat microcatheter (Terumo) to reach the segmental branches of the right portal vein. Squid (Balt) was used as the embolizing material.
Portography performed with a right percutaneous approach
Embolización con Squid de las ramas portales derechas
Final control where the occlusion of all right portal branches is observed.
Bibliografy:


Portal Vein Embolization: The Continued Search for the Ideal Embolic Agent