

SIRT with Occlusafe in unresectable HCC, portal vein thrombosis and high-flow fistula

Physician: Giulio Eugenio Vallati MD

Location: Department of Radiology and Interventional Oncology, Regina Elena National Cancer Institute, Rome, Italy



CLINICAL CASE

An 80-years-old man with history of cirrhosis (HCV+) affected by progressive weight loss and high AFP level. Abdominal CT showed a massive hepatic lesion in the right lobe (140 x 110 x 75 mm) with right portal vein invasion. The case was suggestive for HCC and suitable for SIRT treatment.

PROCEDURE

The angiographic check showed the origin of right hepatic artery (RHA) from superior mesenteric artery. The RHA was supplying the lesion. Moreover, a high flow portal-arterial fistula was documented. Therefore we decided to perform SIRT with Occlusafe® to prevent the reflux of micro-spheres and temporary occlude the fistula. The treatment started with super-selective catheterization of RHA with Guidewire® GT and Occlusafe® micro-balloon catheter (Terumo, Japan). After balloon inflation, we performed SIRT by injection of Y90-microspheres.

FOLLOW UP/ CONCLUSION

SPECT-CT was performed soon after SIRT. It confirmed the expected distribution of Y90-microspheres. CT was performed 3 months after SIRT and documented a good response to treatment also confirmed by the expected distribution of Y90-microspheres. Tumor necrosis and reduction of portal vein thrombosis was reported. The healthy liver was unharmed.

PRODUCTS USED

Glidecath® Hydrophilic Simmons 1, Guidewire® M 0.035", Occlusafe® micro-balloon catheter; Guidewire® GT wire 0.014"; SIRT with Sir-Spheres® (2.1 GBq (SIRTEX, Australia).

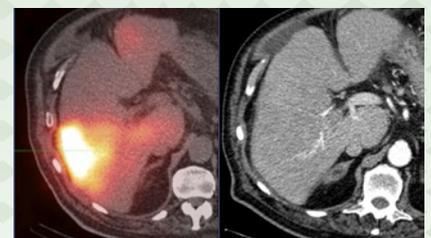


CT before treatment documented a large hepatic lesion in the right lobe with thrombosis of right portal vein.



On the left: the angiography showed the origin of RHA from SMA and the high flow portal-arterial fistula.

On the right: absence of fistula after inflation of Occlusafe micro-balloon catheter followed by selective treatment.



On the left: SPECT-CT after TARE confirmed the expected dose distribution.

On the right: CT exam 3 months after treatment showed a good response supported by necrosis and reduction of portal vein thrombosis. months after treatment.