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Liver Transplantation after Downstaging with Electrochemotherapy of Large Hepatocellular Carcinoma and Portal Vein Tumor Thrombosis: A Case Report

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Abstract: S.R. 53 years. January 2009: HCV-related cirrhosis, Child-Pugh A5 class, EGDS no aesophageal Varices. No important comorbidities. Treated with PEG-IFN+Ribavirin (march-november 2009) with subsequent sustained virologic response. HCVRNA absent overtime. October 2016: CT detected small HCC nodule in the VIII segment (diam.=12 mm). Treated with US guided RF-ablation. November 2016 CT: complete necrosis. Unfortunately, the patient dropped out US and CT follow-up controls. September 2018: asthenia and weight loss. CT showed a large tumor infiltrating V-VII-VI segments and complete PVTT of right portal vein and its branches. Surgical Consultation excluded indication to Liver resection and OLT. 23 october 2018: ECT of a large peri-hilar area of the tumor including the PVTT. 1 and 3 months post-treatment CT showed complete necrosis and retraction of the thrombus and residual viable tumor in the peripheral portion of the right lobe. Therefor, the patient was reevaluated for OLT and considered eligible in waiting list. March 2019: CT showed no perihilar or portal vein recurrence and distant progression in the right lobe. March 2019: Trans-arterial-Radio-therapy (TARE) of the right lobe. Post-treatment CT demonstrated no perihilar or portal vein recurrence and extensive necrosis of the residual tumor. December 2019: CT demonstrated several recurrences of HCC infiltrating the VI and VII segment. However no recurrence was observed at hepatic hilum and in portal vessels. Therefore, on February 2020 the patient received OLT. At 44 months follow-up, no complication or recurrence or liver disfunction have been observed.

Keywords: hepatocellular carcinoma, portal vein tumor thrombosis, interventional ultrasound, liver tumor ablation, liver transplantation

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