

Neuroendocrine tumor – recipient or donor derived?

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Neuroendocrine tumors (NET) are a heterogeneous group of neoplasms with a predominant localization in the gastrointestinal tract. NET metastases within the liver represent a rare indication for liver transplantation (LT). We report a case of NET within a graft detected after liver transplantation. 49-year old male was transplanted in 10/2013 due to alcoholic liver cirrhosis with no other comorbidities. His early postoperative period was uneventful and he was discharged on triple immunosuppressive therapy. 11 days after LT, an oval hypoechogenic 15mm lesion was detected by ultrasound, localized in the left lobe of the liver. During follow-up the lesion was stable until 11 months later when abdominal MRI identified 2 hypovascular lesions (20mm and 11mm), also confirmed by MSCT and characterised as hemangiomas. 2.5 years after LT, MRI showed multiple lesions throughout the liver parenchyma which biopsy identified as NET grade II. In 9/2018, the patient was re-transplanted. Histology report showed that 60% of liver was infiltrated by NET. 5 months after reLT the patient is unremarkable with no signs of NET recurrence/dissemination. Tumors after solid organ transplantation develop as a) a recurrence/dissemination of a primary tumor, b) de novo formation or c) as donor/organ derived tumors. This case demonstrates that transplanted organs can be the primary source of tumors. Although rare, these cases have been previously described. This case also emphasizes the importance of long term follow-up after LT.