Multivisceral Transplant Prognosis and Complications in Patients with Severe Metastatic Neuroendocrine Tumor

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Introduction

Neuroendocrine tumors (NETs) are an uncommon group of malignancy that typically originate in the gastrointestinal tract and commonly metastasize throughout the digestive system. Tumor can involve multiple organs including intestine, pancreas, lymph node and liver. Rare cases of substantial NET metastases have been reported in which multivisceral transplant may rarely be indicated.

Methods

We evaluated patient outcomes, prognosis and complications following multivisceral transplant for NET in a single academic center. A retrospective chart review was conducted between 2010 and 2021 at a single transplant center. Patients that received multivisceral transplant due to metastatic NET were identified. Data was collected including demographic, tumor involvement, transplant course, rejection, infection, disease recurrence, graft survival and patient survival.

The authors have no conflicts of interest to report.

Results

• Mean length of hospitalization was 33 days (range 18-43).
• 0% cancer recurrence after 12 months.
• One patient developed angiosarcoma 2 years 9 months post-transplant.
• One patient developed recurrent liver carcinoma 8 years 8 months post-transplant.
• Two patients are currently living. Two patients died at 3 years and 5 years post-transplant.

Conclusion

This study provides community-specific data on the prognosis and complications of multivisceral transplantation due to metastatic NET. With the incidence of metastatic NET increasing each year in the United States, further studies are vital to analyze the therapeutic benefit and long-term progression of these rare clinical cases.

References


Patient Data

Four patients underwent multivisceral transplant.

- Mean age was 45 years (range 36-55)
- 75% male and 25% female
- 50% involved liver, pancreas, small intestine
- 50% also included distal stomach and proximal colon