

# C11

## An Aggressive Multi-disciplinary Approach to Advanced Neuroendocrine Tumors

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**Background:** Neuroendocrine tumors continue to be a difficult to treat cancer with a less than 70% 5 year survival, with little improvement over the last few decades. A multi-disciplinary approach to neuroendocrine cancer is essential.

**Methods:** A 53-year-old female with jaundice; and was found to have a 13 cm tumor occupying the pancreatic head. The unresectable tumor occluded the portal vein and encased the hepatic artery. Initial neoadjuvant therapy included external beam radiation and chemotherapy. Subsequent, radioactive octreotide (In111) was used to decrease the tumor size. The well-differentiated neuroendocrine tumor was resected with a pancreaticoduodenectomy, requiring a portal vein and a hepatic artery reconstruction (no perioperative complications; blood loss = 400cc; operative time = 636 min; and the LOS = 9 days). The pathology revealed islet cell tumor with microscopic islands of tumor in the peri-aortic tissue. The patient is doing well without clinical recurrence at 18 month follow up, with a planned 3<sup>rd</sup> cycle of radioactive octreotide.

A 41-year-old female with new onset abdominal pain, and was diagnosed with a 24cm neuroendocrine liver tumor. CT imaging reveals tumor replacement of the right lobe of the liver and additional left liver lesions. The patient underwent radioactive octreotide (In111) treatment to control the systemic disease. Surgery included resection of the primary jejunal lesion and a right hepatectomy (no peri-operative complications; blood loss = 250cc; LOS = 6 days). During a staged liver resection the left lobe of liver was cleared. A 3<sup>rd</sup> round of radioactive octreotide was utilized. The patient is doing well with minimal stable disease 18 months after diagnosis. Additional options for tumor progress will include Selective Internal Radiation Therapy (SIRT) and/or liver transplantation.

**Conclusions:** An aggressive multi-disciplinary approach to neuroendocrine tumors can be performed safely and may provide a survival benefit.