A Rare Case of Gastric Mixed Neuroendocrine-Non-Neuroendocrine Neoplasms (G-MiNEN) with Splenic Invasion Treated with Laparoscopic Total Gastrectomy with en bloc Splenectomy and Neoadjuvant FLOT (MAGIC) Therapy

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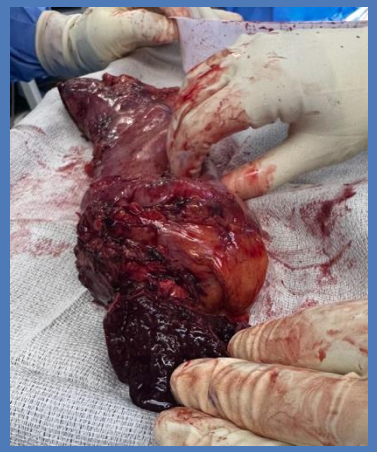
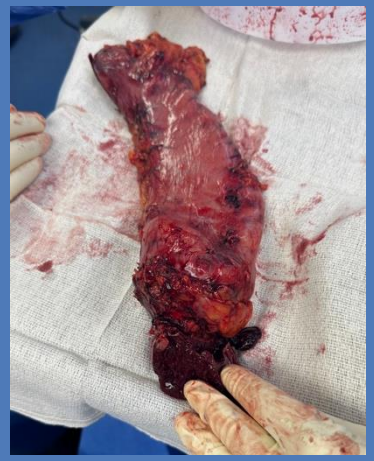
Introduction: Gastric Mixed Neuroendocrine-Non-Neuroendocrine Neoplasms (G-MiNENs) are a rare form of gastric tumor that make up less than 1% of gastric tumors. There are no documented case reports of G-MiNENs with splenic invasion successfully treated with surgical resection and chemotherapy.

Case Presentation: A 70 year old male with T4 N2 M0 adenocarcinoma of the stomach cardia underwent imaging, EUS, and diagnostic laparoscopy to rule out overt metastatic disease. He underwent neoadjuvant chemotherapy with FLOT (MAGIC) and returned to the operating room for surgical resection. He underwent a laparoscopic total gastrectomy with Roux-en-Y reconstruction, en bloc splenectomy, D2 lymphadenectomy, EGD, and jejunostomy placement. Pathology showed gastric adenocarcinoma and an incidentally found gastric neuroendocrine tumor. The patient completed adjuvant chemotherapy with FOLFOX therapy.





Discussion: G-MiNENs are a rare form of gastric cancer, necessitating a multidisciplinary treatment approach through surgical and medical management. There are no documented case reports of G-MiNENs with splenic invasion. This rare occurrence can be useful in the planning surgical management of G-MiNENs, in order to plan for en bloc surgical resection.

Conclusion: The patient was followed closely throughout the treatment process and repeat PET-CT scan after surgical and medical treatment was completed revealed no recurrence of malignancy.

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