

Gastrojejunostomy as an Evolving Therapeutic Paradigm in the Management of Metastatic Pancreatic Tumors: A Comprehensive Case Review Illuminating the Strategic Role of Gastrointestinal Anastomosis

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ABSTRACT

In the intricate landscape of metastatic pancreatic tumors, the therapeutic approach continues to evolve, with a burgeoning emphasis on innovative strategies to enhance patient outcomes. This comprehensive case review delves into the nuanced realm of gastrojejunostomy as a pivotal intervention in the management of metastatic pancreatic tumors. The case under scrutiny presents a compelling narrative of a patient grappling with the formidable challenge of pancreatic malignancy, wherein the judicious application of gastrojejunostomy emerged as a strategic maneuver to navigate the complexities of gastrointestinal obstruction.

Our analysis unfolds the intricate details of the patient's clinical journey, exploring the diagnostic intricacies, treatment modalities, and the ultimate decision-making process leading to the implementation of gastrojejunostomy. The discussion encapsulates the anatomical and physiological considerations inherent to this procedure, delineating its role in mitigating symptoms, improving nutritional status, and fostering an enhanced quality of life for the afflicted individual.

Furthermore, we illuminate the broader implications of gastrojejunostomy within the context of multidisciplinary care, underscoring its integration into the evolving landscape of therapeutic options for metastatic pancreatic tumors. This case review endeavors to contribute valuable insights into the clinical decision-making matrix, providing clinicians with a nuanced understanding of the role and potential benefits of gastrojejunostomy in the comprehensive management of patients with metastatic pancreatic malignancies. As the medical community continues to unravel the intricacies of gastrointestinal anastomosis, this exploration serves as a testament to the evolving armamentarium available to confront the challenges posed by metastatic pancreatic tumors, ultimately fostering a more informed and effective approach to patient care.

KEYWORDS: gastrojejunostomy, surgical, pancreatic.

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INTRODUCTION

Metastatic pancreatic tumors present a formidable challenge within the spectrum of oncological pathology, necessitating an ongoing refinement of therapeutic strategies to alleviate symptoms and enhance the quality of life for affected individuals. Among the multifaceted interventions available, gastrojejunostomy emerges as a compelling and evolving approach in the comprehensive management of metastatic pancreatic malignancies. This case review embarks on a detailed exploration of the intricacies surrounding the utilization of gastrojejunostomy as a therapeutic maneuver,

shedding light on its role in addressing the complexities associated with gastrointestinal obstruction in the context of metastatic pancreatic tumors.^{1,2,3}

The landscape of pancreatic cancer is marked by its aggressive nature and limited treatment options, particularly in cases where metastatic spread further compounds the clinical scenario. In this context, the significance of gastrojejunostomy lies not only in its ability to palliate symptoms related to tumor-induced gastrointestinal obstruction but also in its potential impact on nutritional status and overall well-being. As we navigate the clinical

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narrative of our featured case, the aim is to unravel the decision-making process that led to the selection of gastrojejunostomy as a pivotal component of the therapeutic armamentarium.^{4,5,6}

This introduction serves as a gateway to a comprehensive analysis, providing a contextual framework for understanding the intricacies of metastatic pancreatic tumors and the evolving role of gastrojejunostomy within this complex paradigm. Through an in-depth exploration of the case at hand, we endeavor to contribute to the expanding body of knowledge guiding clinicians in the judicious application of gastrojejunostomy as a strategic intervention in the management of metastatic pancreatic malignancies. As we embark on this exploration, we invite the reader to delve into the clinical nuances and therapeutic considerations that underscore the integration of gastrojejunostomy into the multidisciplinary approach to address the challenges posed by metastatic pancreatic tumors.^{6,7,8}

CASE PRESENTATION

A 68-year-old female patient with the following chronic history of major generative disorders: breast cancer resolved by right mastectomy 10 years ago, systemic arterial hypertension of 20 years of evolution under treatment, a cesarean section and a hysterectomy. Hereditary and family history: father died of laryngeal cancer, mother died of unspecified psychiatric disorder, brother died of complications of Hepatitis C.

Current condition: She began approximately 1 month ago with the presence of dyspepsia and intolerance to solid food, which later progressed to solid food, for which reason she went to the doctor, who requested a panendoscopy with biopsy.

Panendoscopy 10/14/2023: hiatal hernia due to sliding, food debris in gastric fundus, exophytic lesion in duodenal bulb covering 90% of the circumference that does not allow passage of the endoscope.

Histopathology report 10/19/2023: Chronic duodenitis with accentuated generative changes of superficial epithelium and crypts, associated with edema, capillary congestion, recent hemorrhage and eosinophil aggregates in the lamina propria, compatible with non-steroidal analgesic enteropathy, lobular hyperplasia of Brunner's glands with focal regenerative changes of the epithelium.

Simple computed axial tomography 10/19/2023: Study with data of lesion at duodenal level to consider neoplastic process with probable antral and pancreatic infiltration. (Figure 1)

An exploratory laparotomy was planned for 10/24/2023. The procedure was performed, with total omentectomy, it was

decided to take a biopsy and proceed to generate gastrojejunal anastomosis, a presumably metastatic pancreatic tumor was suspected.

Histopathologic report of 10/31/2023: Fibroadipose tissue with microscopic foci of poorly differentiated malignant neoplasm.

Patient of the seventh decade of life, who in a private environment is initiated study protocol for probable lesion of presumably benign characteristics, however, continues approach in the General Hospital Zone 1A of the Mexican Social Security Institute, where from the beginning with the imaging studies a lesion with characteristics of malignancy is appreciated. A histopathological report from the private hospital was obtained, where it was specified that the lesion was benign, however, due to intolerance to the oral route, it was decided to perform digestive bypass surgery, during the surgery, a lesion of pancreatic origin was observed, which presented invasion to the first and second portion of the duodenum and to the antral gastric region. astrojejunalAnastomosis was performed and tissue from the greater omentum was collected. In the post-surgical period, a nasogastric tube was indicated for 5 days (Figure 2) previously she had a central venous catheter and parenteral nutrition, after the established fasting period, a liquid diet was started and continued progressing in the following days with adequate tolerance of the same; Ten days after the surgery the patient was discharged from the hospital and sent to the service of the Centro Médico Nacional Siglo XXI of the Instituto Mexicano del Seguro Social to evaluate neoadjuvant treatment. (Figure 3).

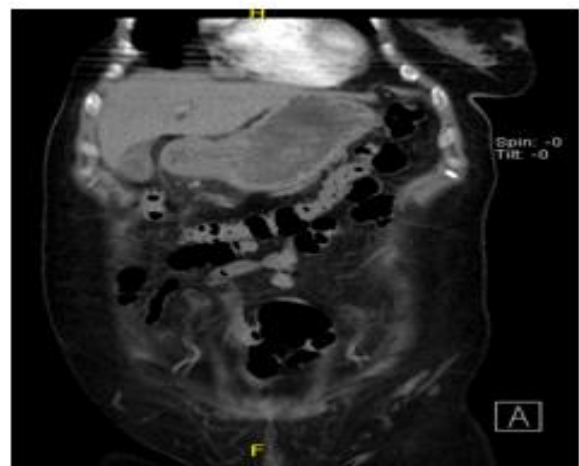


Figure 1. Pre-surgical image. Thickening of the gastric antrum, first and second portion of the duodenum.

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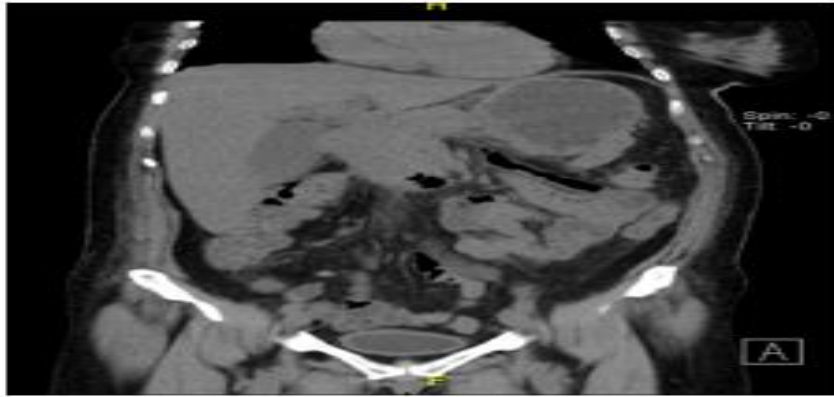


Figure 2. Post-surgical image. Biliodigestive bypass procedure with gastrojejunal anastomosis is visualized.

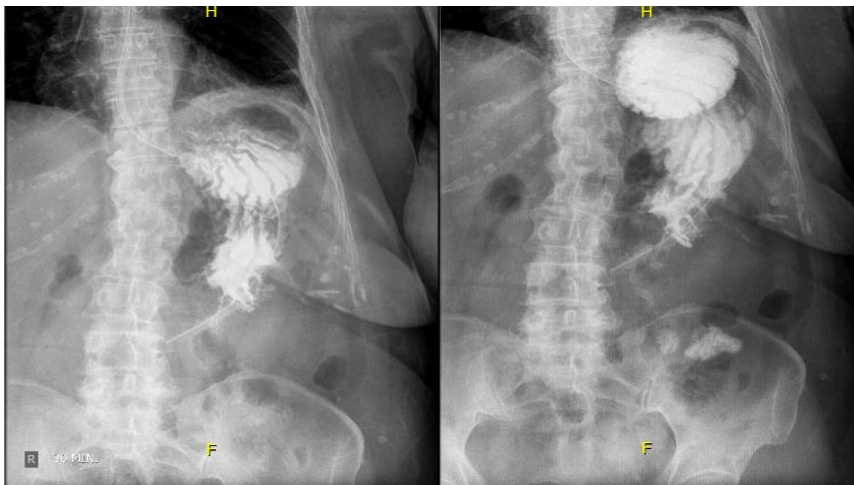


Figure 3. Esophagogastrojejunal series. Where biliodigestive derivative procedure is evidenced.

CONCLUSION

In the realm of metastatic pancreatic tumors, the deployment of gastrojejunostomy as a strategic therapeutic intervention underscores the dynamic landscape of contemporary oncological care. This case review has traversed the intricate contours of a patient's clinical journey, illuminating the pivotal role of gastrojejunostomy in the management of a metastatic pancreatic tumor-induced gastrointestinal obstruction. Our exploration has not only delved into the technical aspects of the gastrojejunostomy procedure but has also highlighted its broader impact on the patient's well-being. By mitigating symptoms associated with obstruction, such as nausea, vomiting, and abdominal pain, gastrojejunostomy emerges as a key player in the palliative care armamentarium. Moreover, the procedure addresses the nutritional challenges posed by pancreatic malignancies, offering a pathway to improve the patient's nutritional status and overall quality of life. The nuanced decision-making process that led to the selection of gastrojejunostomy in this case underscores the importance of a multidisciplinary approach in managing metastatic pancreatic tumors. The integration of surgical interventions, such as gastrojejunostomy, into the treatment algorithm reflects a holistic strategy aimed at optimizing patient outcomes and

fostering a patient-centered approach to care. As we conclude this case review, it becomes evident that gastrojejunostomy serves as more than just a procedural intervention—it represents a conscientious response to the multifaceted challenges posed by metastatic pancreatic tumors. The evolving landscape of oncological care continues to redefine the role of gastrojejunostomy, positioning it as an essential component in the comprehensive management of patients facing the intricate intersection of metastatic pancreatic malignancies and gastrointestinal obstruction. This exploration contributes to the growing body of knowledge surrounding the therapeutic landscape of metastatic pancreatic tumors, offering insights that may guide clinicians in their decision-making processes. In the pursuit of enhanced patient care, gastrojejunostomy emerges not only as a technical intervention but as a symbol of adaptability and innovation in the face of complex clinical scenarios, embodying the relentless quest for improved outcomes and patient well-being in the challenging realm of metastatic pancreatic malignancies.

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