OPINION REVIEW
5124 Malignant insulinoma: Can we predict the long-term outcomes?
Cigrovski Berkovic M, Ulamec M, Marinovic S, Balen I, Mrzljak A

MINIREVIEWS
5133 Practical points that gastrointestinal fellows should know in management of COVID-19
Sahin T, Simsek C, Balaban HY
5146 Nanotechnology in diagnosis and therapy of gastrointestinal cancer
Liang M, Li LD, Li L, Li S
5156 Advances in the clinical application of oxycodone in the perioperative period
Chen HY, Wang ZN, Zhang WY, Zhu T

ORIGINAL ARTICLE
5165 Circulating miR-627-5p and miR-199a-5p are promising diagnostic biomarkers of colorectal neoplasia

Retrospective Cohort Study
5185 Management and outcome of bronchial trauma due to blunt versus penetrating injuries

Retrospective Study
5196 Ovarian teratoma related anti-N-methyl-D-aspartate receptor encephalitis: A case series and review of the literature
Li SJ, Yu MH, Cheng J, Bai WX, Di W
5208 Endoscopic surgery for intraventricular hemorrhage: A comparative study and single center surgical experience
Wang FB, Yuan XW, Li JX, Zhang M, Xiang ZH
5217 Protective effects of female reproductive factors on gastric signet-ring cell carcinoma
Li Y, Zhong YX, Xu Q, Tian YT
5230 Risk factors of mortality and severe disability in the patients with cerebrovascular diseases treated with perioperative mechanical ventilation
Zhang JZ, Chen H, Wang X, Xu K
<table>
<thead>
<tr>
<th>Page</th>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>5266</td>
<td>Long-term outcomes of high-risk percutaneous coronary interventions under extracorporeal membrane oxygenation support: An observational study</td>
<td>Huang YX, Xu ZM, Zhao L, Cao Y, Chen Y, Qiu YG, Liu YM, Zhang PY, He JC, Li TC</td>
</tr>
<tr>
<td>5275</td>
<td>Health care worker occupational experiences during the COVID-19 outbreak: A cross-sectional study</td>
<td>Li XF, Zhou XL, Zhao SX, Li YM, Pan SQ</td>
</tr>
<tr>
<td>5287</td>
<td>Enhanced recovery after surgery strategy to shorten perioperative fasting in children undergoing non-gastrointestinal surgery: A prospective study</td>
<td>Ying Y, Xu HZ, Han ML</td>
</tr>
<tr>
<td>5297</td>
<td>Orthodontic treatment combined with 3D printing guide plate implant restoration for edentulism and its influence on mastication and phonic function</td>
<td>Yan LB, Zhou YC, Wang Y, Li LX</td>
</tr>
<tr>
<td>5306</td>
<td>Effectiveness of psychosocial intervention for internalizing behavior problems among children of parents with alcohol dependence: Randomized controlled trial</td>
<td>Omkarappa DB, Rentala S, Nattala P</td>
</tr>
<tr>
<td>5317</td>
<td>Crouzon syndrome in a fraternal twin: A case report and review of the literature</td>
<td>Li XJ, Su JM, Ye XW</td>
</tr>
<tr>
<td>5324</td>
<td>Laparoscopic duodenojejunostomy for malignant stenosis as a part of multimodal therapy: A case report</td>
<td>Murakami T, Matsui Y</td>
</tr>
<tr>
<td>5331</td>
<td>Chordoma of petrosal mastoid region: A case report</td>
<td>Hua JJ, Ying ML, Chen ZW, Huang C, Zheng CS, Wang YJ</td>
</tr>
<tr>
<td>5337</td>
<td>Pneumatosis intestinalis after systemic chemotherapy for colorectal cancer: A case report</td>
<td>Liu H, Hsieh CT, Sun JM</td>
</tr>
<tr>
<td>5343</td>
<td>Mammary-type myofibroblastoma with infarction and atypical mitosis-a potential diagnostic pitfall: A case report</td>
<td>Zeng YF, Dai YZ, Chen M</td>
</tr>
</tbody>
</table>
## Contents

**Thrice Monthly Volume 10 Number 16 June 6, 2022**

<table>
<thead>
<tr>
<th>Page</th>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>5365</td>
<td>Neonatal hemorrhage stroke and severe coagulopathy in a late preterm infant after receiving umbilical cord milking: A case report</td>
<td>Lu Y, Zhang ZQ</td>
</tr>
<tr>
<td>5373</td>
<td>Heel pain caused by os subcalcis: A case report</td>
<td>Saijilafu, Li SY, Yu X, Li ZQ, Yang G, Lv JH, Chen GX, Xu RJ</td>
</tr>
<tr>
<td>5380</td>
<td>Pulmonary lymphomatoid granulomatosis in a 4-year-old girl: A case report</td>
<td>Yao JW, Qiu L, Liang P, Liu HM, Chen LN</td>
</tr>
<tr>
<td>5387</td>
<td>Idiopathic membranous nephropathy in children: A case report</td>
<td>Cui KH, Zhang H, Tao YH</td>
</tr>
<tr>
<td>5394</td>
<td>Successful treatment of aortic dissection with pulmonary embolism: A case report</td>
<td>Chen XG, Shi SY, Ye YY, Wang H, Yao WF, Hu L</td>
</tr>
<tr>
<td>5400</td>
<td>Renal papillary necrosis with urinary tract obstruction: A case report</td>
<td>Pan HH, Luo YJ, Zhu QG, Ye LF</td>
</tr>
<tr>
<td>5414</td>
<td>Successful living donor liver transplantation with a graft-to-recipient weight ratio of 0.41 without portal flow modulation: A case report</td>
<td>Kim SH</td>
</tr>
<tr>
<td>5420</td>
<td>Treatment of gastric hepatoid adenocarcinoma with pembrolizumab and bevacizumab combination chemotherapy: A case report</td>
<td>Liu M, Luo C, Xie ZZ, Li X</td>
</tr>
<tr>
<td>5428</td>
<td>Ipsilateral synchronous papillary and clear renal cell carcinoma: A case report and review of literature</td>
<td>Yin J, Zheng M</td>
</tr>
<tr>
<td>5441</td>
<td>PIGN mutation multiple congenital anomalies-hypotonia-seizures syndrome 1: A case report</td>
<td>Hou F, Shan S, Jin H</td>
</tr>
<tr>
<td>Page</td>
<td>Title</td>
<td>Authors</td>
</tr>
<tr>
<td>------</td>
<td>-------------------------------------------------------------------------------------------</td>
<td>----------------------------------------------</td>
</tr>
<tr>
<td>5446</td>
<td>Pediatric acute myeloid leukemia patients with i(17)(q10) mimicking acute promyelocytic leukemia: Two case reports</td>
<td>Yan HX, Zhang WH, Wen JQ, Liu YH, Zhang BJ, Ji AD</td>
</tr>
<tr>
<td>5456</td>
<td>Fatal left atrial air embolism as a complication of percutaneous transthoracic lung biopsy: A case report</td>
<td>Li YW, Chen C, Xu Y, Weng QP, Qian SX</td>
</tr>
<tr>
<td>5463</td>
<td>Diagnostic value of bone marrow cell morphology in visceral leishmaniasis-associated hemophagocytic syndrome: Two case reports</td>
<td>Shi SL, Zhao H, Zhou BJ, Ma MB, Li XJ, Xu J, Jiang HC</td>
</tr>
<tr>
<td>5470</td>
<td>Rare case of hepatocellular carcinoma metastasis to urinary bladder: A case report</td>
<td>Kim Y, Kim YS, Yoo JJ, Kim SG, Chin S, Moon A</td>
</tr>
<tr>
<td>5479</td>
<td>Osteotomy combined with the trephine technique for invisible implant fracture: A case report</td>
<td>Chen LW, Wang M, Xia HB, Chen D</td>
</tr>
<tr>
<td>5487</td>
<td>Clinical diagnosis, treatment, and medical identification of specific pulmonary infection in naval pilots: Four case reports</td>
<td>Zeng J, Zhao GL, Yi JC, Liu DD, Jiang YQ, Lu X, Liu YB, Xue F, Dong J</td>
</tr>
<tr>
<td>5502</td>
<td>Mixed large and small cell neuroendocrine carcinoma of the stomach: A case report and review of literature</td>
<td>Li ZF, Lu HZ, Chen YT, Bai XF, Wang TB, Fei H, Zhao DB</td>
</tr>
<tr>
<td>5510</td>
<td>Pleural involvement in cryptococcal infection</td>
<td>Georgakopoulou VE, Damaskos C, Sklapani P, Trakas N, Gkoufa A</td>
</tr>
<tr>
<td>5515</td>
<td>Electroconvulsive therapy plays an irreplaceable role in treatment of major depressive disorder</td>
<td>Ma ML, He LP</td>
</tr>
</tbody>
</table>

**LETTER TO THE EDITOR**

<table>
<thead>
<tr>
<th>Page</th>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>5510</td>
<td>Pleural involvement in cryptococcal infection</td>
<td>Georgakopoulou VE, Damaskos C, Sklapani P, Trakas N, Gkoufa A</td>
</tr>
<tr>
<td>5515</td>
<td>Electroconvulsive therapy plays an irreplaceable role in treatment of major depressive disorder</td>
<td>Ma ML, He LP</td>
</tr>
</tbody>
</table>
ABOUT COVER
Editorial Board Member of World Journal of Clinical Cases, Shivanshu Misra, MBBS, MCh, MS, Assistant Professor, Surgeon, Department of Minimal Access and Bariatric Surgery, Shivani Hospital and IVF, Kanpur 208005, Uttar Pradesh, India. shivanshu_medico@rediffmail.com

AIMS AND SCOPE
The primary aim of World Journal of Clinical Cases (WJCC, World J Clin Cases) is to provide scholars and readers from various fields of clinical medicine with a platform to publish high-quality clinical research articles and communicate their research findings online.

WJCC mainly publishes articles reporting research results and findings obtained in the field of clinical medicine and covering a wide range of topics, including case control studies, retrospective cohort studies, retrospective studies, clinical trials studies, observational studies, prospective studies, randomized controlled trials, randomized clinical trials, systematic reviews, meta-analysis, and case reports.

INDEXING/ABSTRACTING
The WJCC is now indexed in Science Citation Index Expanded (also known as SciSearch®), Journal Citation Reports/Science Edition, Scopus, PubMed, and PubMed Central. The 2021 Edition of Journal Citation Reports® cites the 2020 impact factor (IF) for WJCC as 1.337; IF without journal self cites: 1.301; 5-year IF: 1.742; Journal Citation Indicator: 0.33; Ranking: 119 among 169 journals in medicine, general and internal; and Quartile category: Q3. The WJCC’s CiteScore for 2020 is 0.8 and Scopus CiteScore rank 2020: General Medicine is 493/793.

RESPONSIBLE EDITORS FOR THIS ISSUE
Production Editor: Xu Guo; Production Department Director: Xiang Li; Editorial Office Director: Jin-Lei Wang.

NAME OF JOURNAL
World Journal of Clinical Cases

ISSN
ISSN 2307-8960 (online)

LAUNCH DATE
April 16, 2013

FREQUENCY
Thrice Monthly

EDITORS-IN-CHIEF
Bao-Gan Peng, Jerzy Tadeusz Chudek, George Kontogeorgos, Maurizio Serati, Ja Hyeon Ku

EDITORIAL BOARD MEMBERS
https://www.wjgnet.com/2307-8960/editorialboard.htm

PUBLICATION DATE
June 6, 2022

COPYRIGHT
© 2022 Baishideng Publishing Group Inc

INSTRUCTIONS TO AUTHORS
https://www.wjgnet.com/bpg/gerinfo/204

GUIDELINES FOR ETHICS DOCUMENTS
https://www.wjgnet.com/bpg/GerInfo/287

GUIDELINES FOR NON-NATIVE SPEAKERS OF ENGLISH
https://www.wjgnet.com/bpg/gerinfo/240

PUBLICATION ETHICS
https://www.wjgnet.com/bpg/GerInfo/288

PUBLICATION MISCONDUCT
https://www.wjgnet.com/bpg/gerinfo/208

ARTICLE PROCESSING CHARGE
https://www.wjgnet.com/bpg/gerinfo/242

STEPS FOR SUBMITTING MANUSCRIPTS
https://www.wjgnet.com/bpg/gerinfo/239

ONLINE SUBMISSION
https://www.ffipublishing.com
**CASE REPORT**

Laparoscopic duodenojejunostomy for malignant stenosis as a part of multimodal therapy: A case report

Teppei Murakami, Yugo Matsui

**BACKGROUND**

Laparoscopic duodenojejunostomy (LDJ) has become the standard surgical procedure for superior mesenteric artery syndrome due to its sufficient outcome in terms of safety and symptom relief. However, there are only a few reports about LDJ for malignant stenosis and its indication remains uncertain.

**CASE SUMMARY**

A 77-year-old woman with a history of pancreatic cancer (PC) treated with distal pancreatectomy with en bloc resection of the transverse colon 7 mo ago was admitted for recurrent vomiting. Imaging upon admission revealed marked distention of the duodenum and a tumor around the duodenojejunal flexure. She was diagnosed with malignant stenosis caused by local recurrence of PC. LDJ was performed with an uneventful postoperative course, followed by chemotherapy which gave her 10 mo overall survival.

**CONCLUSION**

We think that LDJ is a valuable method for unresectable malignant stenosis around the duodenojejunal flexure as a part of multimodal therapy.

**Key Words:** Duodenojejunostomy; Laparoscopic surgery; Malignant stenosis; Pancreatic cancer; Multimodal therapy

©The Author(s) 2022. Published by Baishideng Publishing Group Inc. All rights reserved.
Core Tip: There are many reports on laparoscopic duodenojejunostomy (LDJ) for superior mesenteric artery syndrome, but rarely for malignant stenosis. In general, prognosis of patients with recurrent cancer is poor; however, development of new chemotherapeutic agents and new combination therapy improve their overall survival. Obstruction due to malignancy is often an obstacle for chemotherapy, and a safe and minimally invasive method would help enable a rapid induction. We think LDJ is a valuable method for patients with unresectable malignant stenosis around the duodenojejunal flexure.

INTRODUCTION

Patients with recurrent or metastatic cancer have poor prognosis, and chemotherapy has a pivotal role in their survival[1-3], especially in highly malignant disease such as pancreatic cancer (PC). When patients with unresectable malignancies require surgery for symptom relief, selection of a minimally invasive procedure allows faster recovery and thus quicker induction of chemotherapy.

Laparoscopic duodenojejunostomy (LDJ) has become the standard surgical procedure for superior mesenteric artery syndrome (SMAS) due to its sufficient short- and long-term outcomes in terms of safety and symptom relief[4,5]. However, there are only a few reports about LDJ for malignant stenosis [6] and its indication remains uncertain.

We report a successful case of LDJ as palliative care in a patient with unresectable malignant stenosis around the duodenojejunal flexure caused by recurrent PC (rPC). The postoperative course was uneventful, and early food consumption and induction of chemotherapy were achieved. Hence, we think this method is valuable for the multimodal therapy of unresectable malignancies.

CASE PRESENTATION

Chief complaints
A 77-year-old woman presented with upper right abdominal distension and recurrent vomiting.

History of present illness
The patient had a history of PC treated with distal pancreatectomy with en bloc resection of the transverse colon 7 mo ago. She presented with upper right abdominal distension and recurrent vomiting since 1 d ago and was admitted to our institution as an emergency.

History of past illness
She underwent distal pancreatectomy with en bloc resection of the transverse colon for PC.

Personal and family history
The patient had no specific family history.

Physical examination
Blood pressure 134/90 mmHg, heart rate 82 beats/min, respiration rate 12 breaths/min and body temperature 36.2 °C were noted upon arrival. The upper right abdomen was distended but soft and there was no abdominal pain.

Laboratory examinations
Creatinine and blood urea nitrogen were elevated to 2.21 mg/dL (normal range: 0.65-1.1 mg/dL) and 28 mg/dL (normal range: 8-20 mg/dL), respectively. Tumor marker carbohydrate antigen 19-9 markedly increased to 6191 U/mL (normal range: 0-45 U/mL).

Imaging examinations
Computed tomography on admission revealed a soft tissue mass dorsal to the stomach and nearby duodenojejunal flexure. We found a dilated duodenum and collapsed jejunum (Figure 1). Upper gastrointestinal examination showed a dilated duodenum, limited extensibility of the stomach and no gastrografin passage through the duodenojejunal flexure (Figure 2A). Upper gastrointestinal endoscopy...
Figure 1 Computed tomography on admission. A and C: Horizontal section; B: Coronal section. Computed tomography revealed a soft tissue mass dorsal to the stomach (C: white dotted line) and nearby duodenojejunal flexure (A and B: white arrow head). Dilated duodenum (d) and collapsed jejunum (A and B: white arrow) was found. g: Stomach; d: Duodenum; p: Pancreas.

Figure 2 Preoperative upper gastrointestinal investigation and upper gastrointestinal endoscopy. A: Upper gastrointestinal investigation showed a dilated duodenum (d), stomach lacking extensibility (g) and no gastroganin passage through the duodenojejunal flexure (white arrow); B: Upper gastrointestinal endoscopy could not pass through the duodenojejunal flexure due to intraluminal stenosis (white arrow) but revealed no mucosal surface change; C: A nasogastric tube was placed to decompress the stomach and duodenum. g: Stomach; d: Duodenum.

revealed stricture at the duodenojejunal flexure due to intraluminal stenosis but revealed no mucosal surface changes (Figure 2B), and a nasogastric tube was placed to decompress the stomach and duodenum (Figure 2C).

FINAL DIAGNOSIS
Malignant stenosis of the duodenojejunal flexure caused by local recurrence of PC.

TREATMENT
Surgical intervention was essential for symptom relief and induction of chemotherapy. Gastrojejunal bypass was thought to be difficult due to the stiffness of the stomach, so we chose to perform DJ. A minimally invasive procedure was necessary for rapid recovery. LDJ was performed 9 d after admission. Decompression of the duodenum with nasogastric tube (Figure 2C) and correction of dehydration by total parenteral nutrition were performed preoperatively.

The patient was placed in the open-leg supine position and a 4-port procedure (Figure 3A) was performed with the operator on the left side of the patient. Laparoscopic findings revealed a dilated duodenum, no gastric mobility and no peritoneal metastasis. With upward traction on the transverse colon, the second and third portions of the duodenum were exposed and mobilized (Figure 4A). We chose the third portion and jejunum about 30 cm anal to the Treitz ligament for anastomosis (Figure 4B and 4C). A side-to-side DJ was performed in an antiperistaltic manner using a stapling device (Signia with 45 mm purple reload; Covidien Japan, Tokyo, Japan) (Figure 4C). The common entry hole was closed with a continuous absorbable V-Loc suture (Covidien Japan) (Figure 4D). The operating time was 90 min with trivial bleeding. No drain was placed. Intraoperative findings are summarized in Figure 3.
 Murakami T et al. Laparoscopic duodenojejunostomy for malignant stenosis

Figure 3 Schematic illustration. A: Port placement; B: Anatomy of anastomosis in laparoscopic duodenojejunostomy.

Figure 4 Images of duodenojejunostomy. A: The second and third portions of the duodenum (d) were exposed and mobilized; B: Enterotomy was created in the third portion of the duodenum (d) and jejunum (j) about 30 cm anal to the Treitz ligament for anastomosis; C: A side-to-side duodenojejunostomy was performed in the manner of antiperistalsis using 45-mm stapling device; D: The common entry hole was closed with a continuous suture. g: Stomach; j: Jejunum.

OUTCOME AND FOLLOW-UP

Postoperative course was uneventful. Oral fluid intake and food consumption were started on postoperative day (POD) 2 and 7, respectively. Upper gastrointestinal examination on POD 5 showed good patency of the anastomosis (Figure 5). The patient was discharged on POD 9, followed by induction of outpatient chemotherapy (nab-paclitaxel + gemcitabine) started on POD 30.

Six months later, (7 mo after the operation), chemotherapy was terminated due to disease progression and the patient’s desire for best supportive care. Although she died of PC 10 mo after the operation, she could tolerate food consumption until just before her death.
DISCUSSION

A single-center case series of LDJ, although for SMAS\(^4\,5,7-11\), showed no mortality, no anastomotic leaks, short length of stay and no recurrence of symptoms (Table 1). With such results, LDJ has been considered to be safe, efficacious and minimally invasive, and has become the standard surgical procedure for SMAS.

Gastrojejunostomy (GJS) used to be performed for SMAS. However, GJS is no longer considered to be a suitable method for SMAS since it has been associated with insufficient duodenal decompression, peptic ulcer, bile gastritis and blind loop syndrome\(^4,9,10\). LDJ, in contrast, provides more sufficient duodenal decompression and a more natural and physiological route for food passage.

The obstruction site in our patient resembled that of SMAS since it was located in the duodenojejunal flexure, and so we thought that LDJ could be a suitable method. As mentioned before, stiffness of the stomach makes GJS a difficult choice. Fortunately, rapid symptom relief and induction of chemotherapy was achieved, thus the selection of LDJ over GJS was an acceptable decision.

Prognosis of rPC after initial curative resection is poor and similar to that of de novo metastatic PC\(^1-3\). However, new anticancer agents and multiagent chemotherapy have improved overall survival (OS). The median OS for patients with rPC treated by chemotherapy is 10-14 mo compared to 3 mo without treatment\(^3\), indicating the significant role of chemotherapy in prolonging the survival of these patients. In terms of our patient, she gained 10 mo survival, comparable to previous reports.

Improvement in quality of life (QOL) is also crucial in the multimodal therapy of cancer patients\(^12-15\). LDJ had a significant role in our patient by enabling oral food intake until the last few days of her life. High QOL is associated with better prognosis in patients receiving chemotherapy\(^12-14\), although psychological distress can interfere with treatment\(^15\). We also believe that improving QOL is particularly important for patients with poor prognostic disease, and the fact that symptom relief and ability to eat were maintained in our patient shows that LDJ can have a significant role in palliative care of patients with obstruction around the duodenojejunal flexure due to unresectable malignant diseases such as lymphoma, PC, gastrointestinal tumor and peritoneal dissemination.

However, the indication for LDJ for unresectable malignancies remains uncertain since reports of LDJ performed on malignant stenosis are scarce\(^6\). LDJ is a method of palliative care, and so the absence of postoperative complications is crucial for prolonging survival of cancer patients by means of chemotherapy\(^16,17\). Preoperative management such as decompression of the duodenum with a nasogastric tube and correction of dehydration, electrolyte balances and nutrition are essential for avoiding complications such as anastomotic leakage. Chang et al\(^4\) argues the importance of preoperative workup in LDJ for SMAS, and we think this can also apply for cancer patients as well.

To our knowledge, this is the first report on the role of LDJ as a part of a multimodal therapy for unresectable cancer. Many anticancer agents expected to prolong survival have been developed to date\(^18\), and the role of minimally invasive surgery that preserve QOL will become increasingly significant. We expect more reports on cases of LDJ for malignant obstructions and hope that this procedure will be
Table 1 Short-term outcomes in recent case-series studies of laparoscopic duodenojejunostomy for superior mesenteric artery syndrome

<table>
<thead>
<tr>
<th>Year</th>
<th>Author</th>
<th>Number of Patients</th>
<th>Mean operation time (min)</th>
<th>Mean length of stay (d)</th>
<th>Complication number of cases</th>
<th>Mortality</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>Richardson et al [7]</td>
<td>2</td>
<td>113</td>
<td>3</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>2003</td>
<td>Kim et al[8]</td>
<td>2</td>
<td>173</td>
<td>5.5</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>2010</td>
<td>Munene et al[9]</td>
<td>13</td>
<td>121</td>
<td>4.5</td>
<td>Trocar site bleeding (1)</td>
<td>None</td>
</tr>
<tr>
<td>2015</td>
<td>Sun et al[10]</td>
<td>14</td>
<td>119</td>
<td>5.5</td>
<td>Dumping syndrome (1)</td>
<td>None</td>
</tr>
<tr>
<td>2017</td>
<td>Chang et al[4]</td>
<td>18</td>
<td>144</td>
<td>5</td>
<td>Ileus (3)</td>
<td>None</td>
</tr>
<tr>
<td>2017</td>
<td>Kirby et al[11]</td>
<td>3</td>
<td>N/A</td>
<td>4.3</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>2021</td>
<td>Jain et al[5]</td>
<td>22</td>
<td>75</td>
<td>7.3</td>
<td>Delayed gastric emptying (4)</td>
<td>None</td>
</tr>
</tbody>
</table>

an acceptable treatment option for patients with unresectable malignant obstruction around the duodenojejunal flexure.

CONCLUSION

LDJ is thought to be a valuable method of palliative care and as a part of multimodal therapy for patients with unresectable malignant stenosis around the duodenojejunal flexure. By preserving QOL, this procedure is expected to be a bridge to chemotherapy for unresectable malignancies.

FOOTNOTES

Author contributions: Murakami T wrote the manuscript; Matsui RY made the manuscript revision; All authors issued final approval for the version to be submitted.

Informed consent statement: Written informed consent was obtained from the patient for publication of this case report and accompanying images.

Conflict-of-interest statement: The authors declare that they have no conflict of interest.

CARE Checklist (2016) statement: The authors have read the CARE Checklist (2016), and the manuscript was prepared and revised according to the CARE Checklist (2016).

Open-Access: This article is an open-access article that was selected by an in-house editor and fully peer-reviewed by external reviewers. It is distributed in accordance with the Creative Commons Attribution NonCommercial (CC BY-NC 4.0) license, which permits others to distribute, remix, adapt, build upon this work non-commercially, and license their derivative works on different terms, provided the original work is properly cited and the use is non-commercial. See: https://creativecommons.org/Licenses/by-nc/4.0/

Country/Territory of origin: Japan

ORCID number: Teppei Murakami 0000-0003-2621-4210; Yugo Matsui 0000-0001-9442-2279.

S-Editor: Chang KL
L-Editor: Kerr C
P-Editor: Chang KL

REFERENCES


