World Journal of *Clinical Cases*

World J Clin Cases 2021 July 6; 9(19): 4881-5351





Published by Baishideng Publishing Group Inc

W J C C World Journal of Clinical Cases

Contents

Thrice Monthly Volume 9 Number 19 July 6, 2021

OPINION REVIEW

4881 Fear of missing out: A brief overview of origin, theoretical underpinnings and relationship with mental health

Gupta M, Sharma A

REVIEW

- 4890 Molecular pathways in viral hepatitis-associated liver carcinogenesis: An update Elpek GO
- 4918 Gastroenterology and liver disease during COVID-19 and in anticipation of post-COVID-19 era: Current practice and future directions

Oikonomou KG, Papamichalis P, Zafeiridis T, Xanthoudaki M, Papapostolou E, Valsamaki A, Bouliaris K, Papamichalis M, Karvouniaris M, Vlachostergios PJ, Skoura AL, Komnos A

Enhancing oxygenation of patients with coronavirus disease 2019: Effects on immunity and other health-4939 related conditions

Mohamed A, Alawna M

MINIREVIEWS

- 4959 Clinical potentials of ginseng polysaccharide for treating gestational diabetes mellitus Zhao XY, Zhang F, Pan W, Yang YF, Jiang XY
- 4969 Remarkable gastrointestinal and liver manifestations of COVID-19: A clinical and radiologic overview Fang LG, Zhou Q
- 4980 Liver injury in COVID-19: Known and unknown Zhou F, Xia J, Yuan HX, Sun Y, Zhang Y
- 4990 COVID-19 and gastroenteric manifestations Chen ZR, Liu J, Liao ZG, Zhou J, Peng HW, Gong F, Hu JF, Zhou Y
- 4998 Role of epithelial-mesenchymal transition in chemoresistance in pancreatic ductal adenocarcinoma Hu X, Chen W
- Insights into the virologic and immunologic features of SARS-COV-2 5007 Polat C, Ergunay K



Thrice Monthly Volume 9 Number 19 July 6, 2021

ORIGINAL ARTICLE

Basic Study

5019 SMAC exhibits anti-tumor effects in ECA109 cells by regulating expression of inhibitor of apoptosis protein family

Jiang N, Zhang WQ, Dong H, Hao YT, Zhang LM, Shan L, Yang XD, Peng CL

Case Control Study

5028 Efficacy of Solitaire AB stent-release angioplasty in acute middle cerebral artery atherosclerosis obliterative cerebral infarction

Wang XF, Wang M, Li G, Xu XY, Shen W, Liu J, Xiao SS, Zhou JH

Retrospective Study

- 5037 Diagnostic value of different color ultrasound diagnostic method in endometrial lesions Lin XL, Zhang DS, Ju ZY, Li XM, Zhang YZ
- 5046 Clinical and pathological features and risk factors for primary breast cancer patients Lei YY, Bai S, Chen QQ, Luo XJ, Li DM
- 5054 Outcomes of high-grade aneurysmal subarachnoid hemorrhage patients treated with coiling and ventricular intracranial pressure monitoring

Wen LL, Zhou XM, Lv SY, Shao J, Wang HD, Zhang X

- 5064 Microwave ablation combined with hepatectomy for treatment of neuroendocrine tumor liver metastases Zhang JZ, Li S, Zhu WH, Zhang DF
- 5073 Clinical application of individualized total arterial coronary artery bypass grafting in coronary artery surgery

Chen WG, Wang BC, Jiang YR, Wang YY, Lou Y

Observational Study

- 5082 Early diagnosis, treatment, and outcomes of five patients with acute thallium poisoning Wang TT, Wen B, Yu XN, Ji ZG, Sun YY, Li Y, Zhu SL, Cao YL, Wang M, Jian XD, Wang T
- 5092 Sarcopenia in geriatric patients from the plateau region of Qinghai-Tibet: A cross-sectional study Pan SQ, Li YM, Li XF, Xiong R
- 5102 Medium-term efficacy of arthroscopic debridement vs conservative treatment for knee osteoarthritis of Kellgren-Lawrence grades I-III

Lv B, Huang K, Chen J, Wu ZY, Wang H

Prospective Study

5112 Impact of continuous positive airway pressure therapy for nonalcoholic fatty liver disease in patients with obstructive sleep apnea

Hirono H, Watanabe K, Hasegawa K, Kohno M, Terai S, Ohkoshi S



Contents

Thrice Monthly Volume 9 Number 19 July 6, 2021

Randomized Controlled Trial

5126 Erector spinae plane block at lower thoracic level for analgesia in lumbar spine surgery: A randomized controlled trial

Zhang JJ, Zhang TJ, Qu ZY, Qiu Y, Hua Z

SYSTEMATIC REVIEWS

5135 Controversies' clarification regarding ribavirin efficacy in measles and coronaviruses: Comprehensive therapeutic approach strictly tailored to COVID-19 disease stages

Liatsos GD

5179 Systematic review and meta-analysis of trans-jugular intrahepatic portosystemic shunt for cirrhotic patients with portal vein thrombosis

Zhang JB, Chen J, Zhou J, Wang XM, Chen S, Chu JG, Liu P, Ye ZD

CASE REPORT

- 5191 Myelodysplastic syndrome transformed into B-lineage acute lymphoblastic leukemia: A case report Zhu YJ, Ma XY, Hao YL, Guan Y
- 5197 Imaging presentation and postoperative recurrence of peliosis hepatis: A case report Ren SX, Li PP, Shi HP, Chen JH, Deng ZP, Zhang XE
- 5203 Delayed retroperitoneal hemorrhage during extracorporeal membrane oxygenation in COVID-19 patients: A case report and literature review Zhang JC, Li T
- 5211 Autologous tenon capsule packing to treat posterior exit wound of penetrating injury: A case report Yi QY, Wang SS, Gui Q, Chen LS, Li WD
- 5217 Treatment of leiomyomatosis peritonealis disseminata with goserelin acetate: A case report and review of the literature

Yang JW, Hua Y, Xu H, He L, Huo HZ, Zhu CF

- 5226 Homozygous deletion, c. 1114-1116del, in exon 8 of the CRPPA gene causes congenital muscular dystrophy in Chinese family: A case report Yang M, Xing RX
- 5232 Successful diagnosis and treatment of jejunal diverticular haemorrhage by full-thickness enterotomy: A case report Ma HC, Xiao H, Qu H, Wang ZJ
- 5238 Liver metastasis as the initial clinical manifestation of sublingual gland adenoid cystic carcinoma: A case report Li XH, Zhang YT, Feng H
- 5245 Severe hyperbilirubinemia in a neonate with hereditary spherocytosis due to a *de novo* ankyrin mutation: A case report

Wang JF, Ma L, Gong XH, Cai C, Sun JJ



World Journal of Clinical Cases		
Conter	nts Thrice Monthly Volume 9 Number 19 July 6, 2021	
5252	Long-term outcome of indwelling colon observed seven years after radical resection for rectosigmoid cancer: A case report	
	Zhuang ZX, Wei MT, Yang XY, Zhang Y, Zhuang W, Wang ZQ	
5259	Diffuse xanthoma in early esophageal cancer: A case report	
	Yang XY, Fu KI, Chen YP, Chen ZW, Ding J	
5266	COVID-19 or treatment associated immunosuppression may trigger hepatitis B virus reactivation: A case report	
	Wu YF, Yu WJ, Jiang YH, Chen Y, Zhang B, Zhen RB, Zhang JT, Wang YP, Li Q, Xu F, Shi YJ, Li XP	
5270	Maintenance treatment with infliximab for ulcerative ileitis after intestinal transplantation: A case report	
	Fujimura T, Yamada Y, Umeyama T, Kudo Y, Kanamori H, Mori T, Shimizu T, Kato M, Kawaida M, Hosoe N, Hasegawa Y, Matsubara K, Shimojima N, Shinoda M, Obara H, Naganuma M, Kitagawa Y, Hoshino K, Kuroda T	
5280	Infliximab treatment of glycogenosis Ib with Crohn's-like enterocolitis: A case report	
	Gong YZ, Zhong XM, Zou JZ	
5287	Hemichorea due to ipsilateral thalamic infarction: A case report	
	Li ZS, Fang JJ, Xiang XH, Zhao GH	
5294	Intestinal gangrene secondary to congenital transmesenteric hernia in a child misdiagnosed with gastrointestinal bleeding: A case report	
	Zheng XX, Wang KP, Xiang CM, Jin C, Zhu PF, Jiang T, Li SH, Lin YZ	
5302	Collagen VI-related myopathy with scoliosis alone: A case report and literature review	
	Li JY, Liu SZ, Zheng DF, Zhang YS, Yu M	
5313	Neuromuscular electrical stimulation for a dysphagic stroke patient with cardiac pacemaker using magnet mode change: A case report	
	Kim M, Park JK, Lee JY, Kim MJ	
5319	Four-year-old anti-N-methyl-D-aspartate receptor encephalitis patient with ovarian teratoma: A case report	
	Xue CY, Dong H, Yang HX, Jiang YW, Yin L	
5325	Glutamic acid decarboxylase 65-positive autoimmune encephalitis presenting with gelastic seizure, responsive to steroid: A case report	
	Yang CY, Tsai ST	
5332	Ectopic opening of the common bile duct into the duodenal bulb with recurrent choledocholithiasis: A case report	
	Xu H, Li X, Zhu KX, Zhou WC	
5339	Small bowel obstruction caused by secondary jejunal tumor from renal cell carcinoma: A case report	
	Bai GC, Mi Y, Song Y, Hao JR, He ZS, Jin J	
5345	Brugada syndrome associated with out-of-hospital cardiac arrest: A case report	
	Ni GH, Jiang H, Men L, Wei YY, A D, Ma X	



Contents

Thrice Monthly Volume 9 Number 19 July 6, 2021

ABOUT COVER

Editorial Board Member of World Journal of Clinical Cases, Fan-Bo Meng, MD, PhD, Chief Doctor, Deputy Director, Professor, Department of Cardiology, China-Japan Union Hospital of Jilin University, Changchun 130000, Jilin Province, China. mengfb@jlu.edu.cn

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 2020 Edition of Journal Citation Reports® cites the 2019 impact factor (IF) for WJCC as 1.013; IF without journal self cites: 0.991; Ranking: 120 among 165 journals in medicine, general and internal; and Quartile category: Q3. The WJCC's CiteScore for 2019 is 0.3 and Scopus CiteScore rank 2019: General Medicine is 394/529.

RESPONSIBLE EDITORS FOR THIS ISSUE

Production Editor: Yan-Xia Xing, Production Department Director: Yun-Xiaojian Wu; Editorial Office Director: Jin-Lei Wang.

NAME OF JOURNAL	INSTRUCTIONS TO AUTHORS
World Journal of Clinical Cases	https://www.wjgnet.com/bpg/gerinfo/204
ISSN	GUIDELINES FOR ETHICS DOCUMENTS
ISSN 2307-8960 (online)	https://www.wignet.com/bpg/GerInfo/287
LAUNCH DATE	GUIDELINES FOR NON-NATIVE SPEAKERS OF ENGLISH
April 16, 2013	https://www.wignet.com/bpg/gerinfo/240
FREQUENCY	PUBLICATION ETHICS
Thrice Monthly	https://www.wjgnet.com/bpg/GerInfo/288
EDITORS-IN-CHIEF	PUBLICATION MISCONDUCT
Dennis A Bloomfield, Sandro Vento, Bao-Gan Peng	https://www.wjgnet.com/bpg/gerinfo/208
EDITORIAL BOARD MEMBERS	ARTICLE PROCESSING CHARGE
https://www.wjgnet.com/2307-8960/editorialboard.htm	https://www.wjgnet.com/bpg/gerinfo/242
PUBLICATION DATE	STEPS FOR SUBMITTING MANUSCRIPTS
July 6, 2021	https://www.wjgnet.com/bpg/GerInfo/239
COPYRIGHT	ONLINE SUBMISSION
© 2021 Baishideng Publishing Group Inc	https://www.f6publishing.com

© 2021 Baishideng Publishing Group Inc. All rights reserved. 7041 Koll Center Parkway, Suite 160, Pleasanton, CA 94566, USA E-mail: bpgoffice@wjgnet.com https://www.wjgnet.com



World Journal of Clinical Cases

Submit a Manuscript: https://www.f6publishing.com

World J Clin Cases 2021 July 6; 9(19): 5339-5344

DOI: 10.12998/wjcc.v9.i19.5339

ISSN 2307-8960 (online)

CASE REPORT

Small bowel obstruction caused by secondary jejunal tumor from renal cell carcinoma: A case report

Gao-Chen Bai, Yue Mi, Yi Song, Jin-Rui Hao, Zhi-Song He, Jie Jin

ORCID number: Gao-Chen Bai 0000-0002-8226-7432; Yue Mi 0000-0002-0806-002X; Yi Song 0000-0002-3554-1603; Jin-Rui Hao 0000-0002-1943-7582; Zhi-Song He 0000-0002-1347-338X; Jie Jin 0000-0001-9512-859X.

Author contributions: Bai GC

acquired the images, wrote the first draft of the manuscript, and submitted the manuscript; Mi Y and Hao JR collected and analyzed the data; He ZS and Jin J designed the study; Song Y critically revised the manuscript for important intellectual content; all authors have read and approved the manuscript for submission.

Informed consent statement:

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

Conflict-of-interest statement: The authors declare that they have no conflict of interest related to this manuscript.

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

Gao-Chen Bai, Yue Mi, Yi Song, Jin-Rui Hao, Zhi-Song He, Jie Jin, Department of Urology, Peking University First Hospital, Beijing 100034, China

Corresponding author: Yi Song, PhD, Professor, Department of Urology, Peking University First Hospital, No. 8 Xishiku Street, Xicheng District, Beijing 100034, China. ddsongyi@263.net

Abstract

BACKGROUND

Secondary jejunal tumor from renal cell carcinoma (RCC) is extremely rare in clinical practice and is easily missed and misdiagnosed because of the low incidence and atypical symptoms.

CASE SUMMARY

A 38-year-old male patient was diagnosed pathologically with left RCC after radical nephrectomy in 2012. The patient then suffered multiple lung metastases 2 years later and was treated with oral sorafenib without progression for 6 years. In 2020, an emergency intestinal segmental resection due to intestinal obstruction was required, and postoperative pathology confirmed a jejunal secondary tumor from RCC. The patient had a smooth recovery following surgery. Three months after surgery, the patient was diagnosed with left adrenal metastasis, and subsequent sintilimab therapy has stabilized his condition.

CONCLUSION

This report is written to remind urologists and pathologists of the potential for small intestinal secondary tumors when a patient with a history of RCC seeks treatment for digestive symptoms. Enteroscopy and abdominal contrast-enhanced computed tomography are essential means of examination, but severe cases require immediate surgical intervention despite the lack of a preoperative examination to distinguish tumor attributes.

Key Words: Small bowel obstruction; Secondary jejunal tumor; Renal cell carcinoma; Surgery; Tumor metastasis; Case report

©The Author(s) 2021. Published by Baishideng Publishing Group Inc. All rights reserved.



WJCC | https://www.wjgnet.com

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: htt p://creativecommons.org/License s/by-nc/4.0/

Manuscript source: Unsolicited manuscript

Specialty type: Medicine, research and experimental

Country/Territory of origin: China

Peer-review report's scientific quality classification

Grade A (Excellent): 0 Grade B (Very good): B Grade C (Good): C, C, C Grade D (Fair): 0 Grade E (Poor): 0

Received: March 8, 2021 Peer-review started: March 8, 2021 First decision: March 25, 2021 Revised: March 29, 2021 Accepted: April 25, 2021 Article in press: April 25, 2021 Published online: July 6, 2021

P-Reviewer: Balducci G, Yang RM S-Editor: Gao CC L-Editor: Wang TQ P-Editor: Wang LL



Core Tip: Jejunal secondary tumor from renal cell carcinoma (RCC) is extremely rare. Herein, we present a case of small bowel obstruction caused by a jejunal secondary tumor from RCC. A male patient who underwent a left radical nephrectomy for RCC before visited the hospital with intestinal obstruction symptoms. Emergency intestinal segmental resection was performed, and postoperative pathology confirmed a jejunal secondary tumor from RCC. This report is written to remind urologists and pathologists of the potential for small intestinal secondary tumors when a patient with a history of RCC seeks treatment for digestive symptoms.

Citation: Bai GC, Mi Y, Song Y, Hao JR, He ZS, Jin J. Small bowel obstruction caused by secondary jejunal tumor from renal cell carcinoma: A case report. World J Clin Cases 2021; 9(19): 5339-5344

URL: https://www.wjgnet.com/2307-8960/full/v9/i19/5339.htm DOI: https://dx.doi.org/10.12998/wjcc.v9.i19.5339

INTRODUCTION

Renal tumors are one of the most common tumors of the urinary system. Approximately 85% of renal tumors are renal cell carcinoma (RCC), and approximately 70% are clear cell histology[1]. Although the diagnosis and treatment of RCC are progressing rapidly, approximately 15% of RCC patients were diagnosed with metastases at the first visit^[2], and approximately 20%-30% with localized RCC will experience recurrence after radical or partial nephrectomy^[3]. Small intestinal secondary tumors from RCC occur infrequently. The most common symptoms are obstruction, anemia, pain, nausea, vomiting, weight loss, and other nonspecific malignancy symptoms[4], which are not specific and easily misdiagnosed. Additionally, postoperative surveillance of RCC may rarely be concerned about intestinal metastases, which are easy to ignore. Herein, we present a case of small bowel obstruction caused by a jejunal secondary tumor from RCC to review the characteristics of its diagnosis, treatment, and prognosis.

CASE PRESENTATION

Chief complaints

On March 8, 2020, a 38-year-old male patient presented to the emergency department with a 20-d history of reduced aerofluxus and defecation, accompanied by intermittent vomiting and abdominal colic.

History of present illness

The patient visited the hospital on July 30, 2012, presenting with a left renal tumor found via abdominal ultrasonography and computed tomography (CT). Laparoscopic radical nephrectomy was performed on August 4, 2012, and the postoperative pathology suggested a renal clear cell carcinoma measuring 6.0 cm × 6.0 cm × 5.5 cm (PT1b). The patient was diagnosed with pulmonary metastasis 2 years later through positron emission tomography-CT (PET-CT) and subsequently treated with oral sorafenib for 6 years without metastatic progression.

Personal and family history

The patient had no special personal and family history.

Physical examination

Physical examination revealed a surgical scar on the left waist, abdominal distension, and severe abdominal tenderness around the umbilicus with mild rebound tenderness. The liver and spleen were impalpable.

Imaging examinations

Abdominal CT revealed small intestinal obstruction caused by a large irregular mass



in the jejunum lumen (Figure 1A). There was no time for further examinations such as enteroscopy and abdominal contrast-enhanced CT.

FINAL DIAGNOSIS

The diagnosis was confirmed as small bowel obstruction due to a jejunal secondary tumor from RCC.

TREATMENT

Emergency segmental resection and end-to-end anastomosis of the small intestine were performed. The postoperative specimen was a cauliflower-like broad-based crunchy lesion measuring 6.5 cm × 5 cm × 5 cm (Figure 1B). The results of the histologic examination were consistent with metastatic renal clear cell carcinoma. The lesion presented as masses of clear tumor cells with small nuclei and abundant cytoplasm surrounded by a net-like fibrovascular stroma (Figure 2A and B). The patient had a smooth recovery following surgery.

OUTCOME AND FOLLOW-UP

Three months after the small intestine surgery, PET-CT showed left adrenal metastasis from RCC (Figure 3). Then sintilimab (200 mg, every 21 d) was given to control the disease progression. The therapy was continued for eight cycles, and the patient was in a stable condition by January 2021.

DISCUSSION

Metachronous metastasis of RCC to the small intestine is a distinctly rare occurrence and is complicated by concomitant lung metastases and subsequent adrenal metastasis [5]. In a retrospective analysis of 44 small intestinal secondary tumors, colon cancer was the most common primary tumor (43.2%), followed by pancreatic and ovarian cancer (11.4% each). RCC accounted for only two in the study (4.5%)[6]. Furthermore, an autopsy report showed that in all 687 cases confirmed as RCC by histology, only two cases were found to have small intestinal metastases, accounting for 0.5% of the 392 metastatic cases [7].

In 15 patients with small intestinal metastases secondary to renal cancer, as summarized by Mueller et al[8], 5 patients presented with gastrointestinal bleeding, 5 with intussusception, 2 with small bowel obstruction, 1 with biliary obstruction, and 1 with both gastrointestinal bleeding and bowel obstruction. Therefore, for patients with a history of renal cancer, the possibility of small intestinal secondary tumors should be considered if the above symptoms are present. Either misdiagnosis or delayed treatment may endanger the health of the patients.

When seeing a patient with similar symptoms and a history of cancer, the disease's vital signs and severity should be assessed initially to determine the appropriate examination and treatment planning. Routine blood tests, liver function tests, bilirubin tests, stool occult blood tests, abdominal X-ray, especially enteroscopy, and abdominal contrast-enhanced CT are practical accessory examinations of diagnosing small bowel tumors and evaluating accompanying symptoms. Serum creatinine tests and other renal function evaluations are also indispensable for the operation history of primary renal tumor[9]. If the situation permits, a full-body imaging examination should be performed to exclude other possible metastatic lesions. In this case, preoperative diagnosis, which is essential for small bowel tumors, was not complete due to difficulty in applying enteroscopy and abdominal contrast-enhanced CT under emergency conditions.

Metastatic small bowel tumors should be differentiated from other malignant lesions such as adenocarcinoma, carcinoid, and lymphoma, the three most common cancers in the small intestine[10]. Valuable information for differential diagnosis can be obtained by examining the morphological features of the lesion via imaging. Small intestinal adenocarcinoma classically presents with a short annular stricture. Carcinoid



WJCC | https://www.wjgnet.com

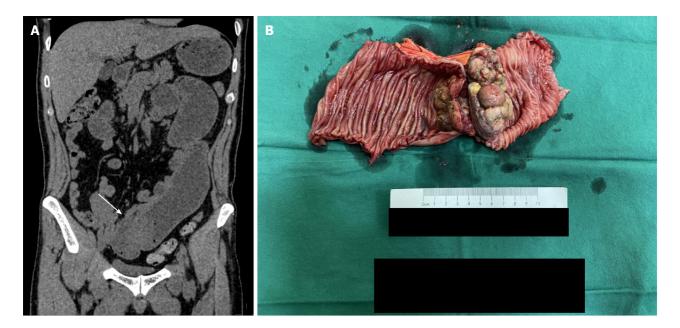


Figure 1 Imaging findings and postoperative specimen. A: Abdominal computed tomography showing small intestine obstruction caused by an irregular large mass in the lumen of the jejunum (white arrow); B: The postoperative specimen showing a cauliflower-like broad-based crunchy lesion measuring 6.5 cm × 5 cm.

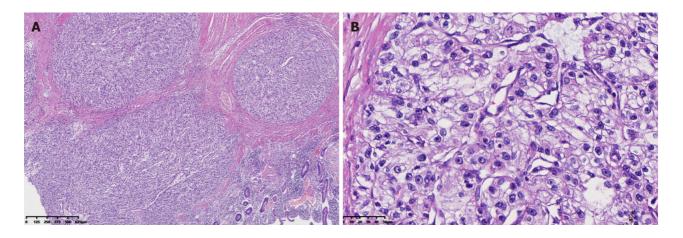


Figure 2 Postoperative histologic examination. A and B: The results of the histologic examination were consistent with metastatic renal clear cell carcinoma. The lesion presented as masses of clear tumor cells with small nuclei and abundant cytoplasm surrounded by a net-like fibrovascular stroma (bars: A, 625 µm; B, 50 µm).

tends to infiltrate the mesentery, causing angulation, kinking, rigidity, and separation of small bowel loops. Lymphoma always presents as a non-obstructive lesion with wall thickening combined with lymphadenopathy and systematic symptoms[11,12]. Metastatic cancers in the small bowel are usually large[13] and should be considered when the patient has a history of malignancy.

Since renal carcinoma is insensitive to chemotherapy and radiotherapy, resection of metastatic lesions is feasible and effective in patients with a previous nephr-ectomy [14]. Alt *et al*[15] reported a retrospective study of 887 patients with confirmed RCC who underwent radical nephrectomies, where 125 patients who underwent complete surgical removal of all metastases had a longer cancer-specific median survival (4.8 years *vs* 1.3 years; *P* < 0.001). Palliative interventions, including enterostomy, bypass surgery, or urgent selective arterial embolization, may benefit the patients with unresectable small intestinal metastatic lesions accompanied by acute intestinal obstruction or bleeding[16,17]. For patients with multiple metastases who are not suitable for surgery, targeted therapy and immunotherapy have become first-line treatments with symptom relief and improved prognosis[18].

Baishidena® WJCC https://www.wjgnet.com

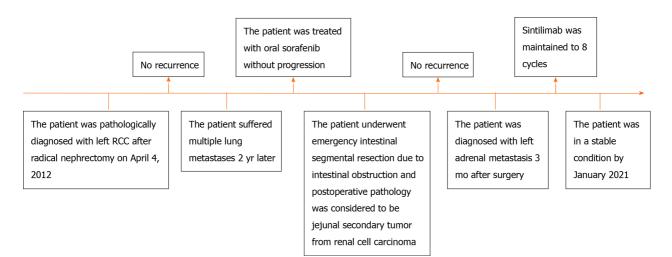


Figure 3 The timeline picture of this case. RCC: Renal cell carcinoma.

CONCLUSION

This case study has been presented to remind urologists and pathologists of the possibility of small intestinal secondary tumors when a patient with a history of RCC presents with digestive symptoms. Enteroscopy and abdominal contrast-enhanced CT are essential means of examination, but severe cases require immediate surgical intervention despite the lack of a preoperative examination to distinguish tumor attributes.

REFERENCES

- Motzer RJ, Jonasch E, Michaelson MD, Nandagopal L, Gore JL, George S, Alva A, Haas N, Harrison MR, Plimack ER, Sosman J, Agarwal N, Bhayani S, Choueiri TK, Costello BA, Derweesh IH, Gallagher TH, Hancock SL, Kyriakopoulos C, LaGrange C, Lam ET, Lau C, Lewis B, Manley B, McCreery B, McDonald A, Mortazavi A, Pierorazio PM, Ponsky L, Redman BG, Somer B, Wile G, Dwyer MA; CGC, Hammond LJ, Zuccarino-Catania G. NCCN Guidelines Insights: Kidney Cancer, Version 2.2020. J Natl Compr Canc Netw 2019; 17: 1278-1285 [PMID: 31693980 DOI: 10.6004/jnccn.2019.0054]
- 2 Siegel RL, Miller KD, Jemal A. Cancer statistics, 2019. CA Cancer J Clin 2019; 69: 7-34 [PMID: 30620402 DOI: 10.3322/caac.21551]
- 3 Williamson TJ, Pearson JR, Ischia J, Bolton DM, Lawrentschuk N. Guideline of guidelines: followup after nephrectomy for renal cell carcinoma. BJU Int 2016; 117: 555-562 [PMID: 26617405 DOI: 10.1111/biu.13384]
- Smith SJ, Carlson HC, Gisvold JJ. Secondary neoplasms of the small bowel. Radiology 1977; 125: 29-33 [PMID: 897183 DOI: 10.1148/125.1.29]
- Nozawa H, Tsuchiya M, Kobayashi T, Morita H, Kobayashi I, Sakaguchi M, Mizutani T, Tajima A, 5 Kishida Y, Yakumaru K, Kagami H, Sekikawa T. Small intestinal metastasis from renal cell carcinoma exhibiting rare findings. Int J Clin Pract 2003; 57: 329-331 [PMID: 12800466 DOI: 10.1046/j.1445-5994.2003.00368.x]
- Minardi AJ Jr, Zibari GB, Aultman DF, McMillan RW, McDonald JC. Small-bowel tumors. J Am Coll Surg 1998; 186: 664-668 [PMID: 9632155 DOI: 10.1016/s1072-7515(98)00092-1]
- 7 Weiss L, Harlos JP, Torhorst J, Gunthard B, Hartveit F, Svendsen E, Huang WL, Grundmann E, Eder M, Zwicknagl M. Metastatic patterns of renal carcinoma: an analysis of 687 necropsies. J Cancer Res Clin Oncol 1988; 114: 605-612 [PMID: 3204107 DOI: 10.1007/BF00398185]
- 8 Mueller JL, Guyer RA, Adler JT, Mullen JT. Metastatic renal cell carcinoma to the small bowel: three cases of GI bleeding and a literature review. CEN Case Rep 2018; 7: 39-43 [PMID: 29185198 DOI: 10.1007/s13730-017-0288-8]
- Wang Z, Wang G, Xia Q, Shang Z, Yu X, Wang M, Jin X. Partial nephrectomy vs. radical 9 nephrectomy for renal tumors: A meta-analysis of renal function and cardiovascular outcomes. Urol Oncol 2016; 34: 533.e11-533. e19 [PMID: 27776978 DOI: 10.1016/j.urolonc.2016.07.007]
- 10 Hatzaras I, Palesty JA, Abir F, Sullivan P, Kozol RA, Dudrick SJ, Longo WE. Small-bowel tumors: epidemiologic and clinical characteristics of 1260 cases from the connecticut tumor registry. Arch Surg 2007; 142: 229-235 [PMID: 17372046 DOI: 10.1001/archsurg.142.3.229]
- Yang CB, Yu N, Jian YJ, Yu Y, Duan HF, Zhang XR, Ma GM, Guo Y, Duan X. Spectral CT 11 Imaging in the Differential Diagnosis of Small Bowel Adenocarcinoma From Primary Small



Intestinal Lymphoma. Acad Radiol 2019; 26: 878-884 [PMID: 30803898 DOI: 10.1016/j.acra.2018.08.020]

- Laurent F, Drouillard J, Lecesne R, Bruneton JN. CT of small-bowel neoplasms. Semin Ultrasound 12 *CT MR* 1995; 16: 102-111 [PMID: 7794601 DOI: 10.1016/0887-2171(95)90003-9]
- 13 STARR A, MILLER GM. Solitary jejunal metastasis twenty years after removal of a renal-cell carcinoma; report of a case. N Engl J Med 1952; 246: 250-251 [PMID: 14890848 DOI: 10.1056/NEJM195202142460703]
- Barata PC, Rini BI. Treatment of renal cell carcinoma: Current status and future directions. CA 14 Cancer J Clin 2017; 67: 507-524 [PMID: 28961310 DOI: 10.3322/caac.21411]
- 15 Alt AL, Boorjian SA, Lohse CM, Costello BA, Leibovich BC, Blute ML. Survival after complete surgical resection of multiple metastases from renal cell carcinoma. Cancer 2011; 117: 2873-2882 [PMID: 21692048 DOI: 10.1002/cncr.25836]
- 16 Azagury D, Liu RC, Morgan A, Spain DA. Small bowel obstruction: A practical step-by-step evidence-based approach to evaluation, decision making, and management. J Trauma Acute Care Surg 2015; 79: 661-668 [PMID: 26402543 DOI: 10.1097/TA.00000000000824]
- 17 Urbano J, Manuel Cabrera J, Franco A, Alonso-Burgos A. Selective arterial embolization with ethylene-vinyl alcohol copolymer for control of massive lower gastrointestinal bleeding: feasibility and initial experience. J Vasc Interv Radiol 2014; 25: 839-846 [PMID: 24755085 DOI: 10.1016/j.jvir.2014.02.024]
- 18 Ljungberg B, Albiges L, Abu-Ghanem Y, Bensalah K, Dabestani S, Fernández-Pello S, Giles RH, Hofmann F, Hora M, Kuczyk MA, Kuusk T, Lam TB, Marconi L, Merseburger AS, Powles T, Staehler M, Tahbaz R, Volpe A, Bex A. European Association of Urology Guidelines on Renal Cell Carcinoma: The 2019 Update. Eur Urol 2019; 75: 799-810 [PMID: 30803729 DOI: 10.1016/j.eururo.2019.02.011]





Published by Baishideng Publishing Group Inc 7041 Koll Center Parkway, Suite 160, Pleasanton, CA 94566, USA Telephone: +1-925-3991568 E-mail: bpgoffice@wjgnet.com Help Desk: https://www.f6publishing.com/helpdesk https://www.wjgnet.com

