

World Journal of *Clinical Cases*

World J Clin Cases 2022 November 16; 10(32): 11665-12065



Contents

Thrice Monthly Volume 10 Number 32 November 16, 2022

OPINION REVIEW

- 11665** Combined use of lactoferrin and vitamin D as a preventive and therapeutic supplement for SARS-CoV-2 infection: Current evidence

Cipriano M, Ruberti E, Tovani-Palone MR

REVIEW

- 11671** Role of adherent invasive *Escherichia coli* in pathogenesis of inflammatory bowel disease
- Zheng L, Duan SL, Dai YC, Wu SC*
- 11690** Emerging potential of ubiquitin-specific proteases and ubiquitin-specific proteases inhibitors in breast cancer treatment

Huang ML, Shen GT, Li NL

MINIREVIEWS

- 11702** Overlap of diabetic ketoacidosis and hyperosmolar hyperglycemic state
- Hassan EM, Mushtaq H, Mahmoud EE, Chhibber S, Saleem S, Issa A, Nitesh J, Jama AB, Khedr A, Boike S, Mir M, Attallah N, Surani S, Khan SA*

ORIGINAL ARTICLE

Case Control Study

- 11712** Comparing the efficacy of different dexamethasone regimens for maintenance treatment of multiple myeloma in standard-risk patients non-eligible for transplantation
- Hu SL, Liu M, Zhang JY*

Retrospective Cohort Study

- 11726** Development and validation of novel nomograms to predict survival of patients with tongue squamous cell carcinoma
- Luo XY, Zhang YM, Zhu RQ, Yang SS, Zhou LF, Zhu HY*

Retrospective Study

- 11743** Non-invasive model for predicting esophageal varices based on liver and spleen volume
- Yang LB, Zhao G, Tantai XX, Xiao CL, Qin SW, Dong L, Chang DY, Jia Y, Li H*

Clinical Trials Study

- 11753** Clinical efficacy of electromagnetic field therapy combined with traditional Chinese pain-reducing paste in myofascial pain syndrome
- Xiao J, Cao BY, Xie Z, Ji YX, Zhao XL, Yang HJ, Zhuang W, Sun HH, Liang WM*

- 11766** Endothelial injury and inflammation in patients with hyperuricemic nephropathy at chronic kidney disease stages 1-2 and 3-4

Xu L, Lu LL, Wang YT, Zhou JB, Wang CX, Xin JD, Gao JD

Observational Study

- 11775** Quality of life and symptom distress after cytoreductive surgery and hyperthermic intraperitoneal chemotherapy

Wang YF, Wang TY, Liao TT, Lin MH, Huang TH, Hsieh MC, Chen VCH, Lee LW, Huang WS, Chen CY

- 11789** Development and validation of a risk assessment model for prediabetes in China national diabetes survey

Yu LP, Dong F, Li YZ, Yang WY, Wu SN, Shan ZY, Teng WP, Zhang B

- 11804** T-cell immunoglobulin mucin molecule-3, transformation growth factor β , and chemokine-12 and the prognostic status of diffuse large B-cell lymphoma

Wu H, Sun HC, Ouyang GF

META-ANALYSIS

- 11812** Prostate artery embolization on lower urinary tract symptoms related to benign prostatic hyperplasia: A systematic review and meta-analysis

Wang XY, Chai YM, Huang WH, Zhang Y

CASE REPORT

- 11827** Paraneoplastic neurological syndrome caused by cystitis glandularis: A case report and literature review

Zhao DH, Li QJ

- 11835** Neck pain and absence of cranial nerve symptom are clues of cervical myelopathy mimicking stroke: Two case reports

Zhou LL, Zhu SG, Fang Y, Huang SS, Huang JF, Hu ZD, Chen JY, Zhang X, Wang JY

- 11845** Nine-year survival of a 60-year-old woman with locally advanced pancreatic cancer under repeated open approach radiofrequency ablation: A case report

Zhang JY, Ding JM, Zhou Y, Jing X

- 11853** Laparoscopic treatment of inflammatory myofibroblastic tumor in liver: A case report

Li YY, Zang JF, Zhang C

- 11861** Survival of a patient who received extracorporeal membrane oxygenation due to postoperative myocardial infarction: A case report

Wang QQ, Jiang Y, Zhu JG, Zhang LW, Tong HJ, Shen P

- 11869** Triple hit to the kidney-dual pathological crescentic glomerulonephritis and diffuse proliferative immune complex-mediated glomerulonephritis: A case report

Ibrahim D, Brodsky SV, Satoskar AA, Biederman L, Maroz N

- 11877** Successful transcatheter arterial embolization treatment for chest wall haematoma following permanent pacemaker implantation: A case report

Zheng J, Tu XM, Gao ZY

- 11882** Brachiocephalic to left brachial vein thrombotic vasculitis accompanying mediastinal pancreatic fistula: A case report
Kokubo R, Yunaiyama D, Tajima Y, Kugai N, Okubo M, Saito K, Tsuchiya T, Itoi T
- 11889** Long survival after immunotherapy plus paclitaxel in advanced intrahepatic cholangiocarcinoma: A case report and review of literature
He MY, Yan FF, Cen KL, Shen P
- 11898** Successful treatment of pulmonary hypertension in a neonate with bronchopulmonary dysplasia: A case report and literature review
Li J, Zhao J, Yang XY, Shi J, Liu HT
- 11908** Idiopathic tenosynovitis of the wrist with multiple rice bodies: A case report and review of literature
Tian Y, Zhou HB, Yi K, Wang KJ
- 11921** Endoscopic resection of bronchial mucoepidermoid carcinoma in a young adult man: A case report and review of literature
Ding YM, Wang Q
- 11929** Blue rubber bleb nevus syndrome complicated with disseminated intravascular coagulation and intestinal obstruction: A case report
Zhai JH, Li SX, Jin G, Zhang YY, Zhong WL, Chai YF, Wang BM
- 11936** Management of symptomatic cervical facet cyst with cervical interlaminar epidural block: A case report
Hwang SM, Lee MK, Kim S
- 11942** Primary squamous cell carcinoma with sarcomatoid differentiation of the kidney associated with ureteral stone obstruction: A case report
Liu XH, Zou QM, Cao JD, Wang ZC
- 11949** Successful live birth following hysteroscopic adhesiolysis under laparoscopic observation for Asherman's syndrome: A case report
Kakinuma T, Kakinuma K, Matsuda Y, Ohwada M, Yanagida K
- 11955** What is responsible for acute myocardial infarction in combination with aplastic anemia? A case report and literature review
Zhao YN, Chen WW, Yan XY, Liu K, Liu GH, Yang P
- 11967** Repeated ventricular bigeminy by trigeminocardiac reflex despite atropine administration during superficial upper lip surgery: A case report
Cho SY, Jang BH, Jeon HJ, Kim DJ
- 11974** Testis and epididymis-unusual sites of metastatic gastric cancer: A case report and review of the literature
Ji JJ, Guan FJ, Yao Y, Sun LJ, Zhang GM
- 11980** t(4;11) translocation in hyperdiploid *de novo* adult acute myeloid leukemia: A case report
Zhang MY, Zhao Y, Zhang JH

- 11987** Sun-burn induced upper limb lymphedema 11 years following breast cancer surgery: A case report
Li M, Guo J, Zhao R, Gao JN, Li M, Wang LY
- 11993** Minimal change disease caused by polycythemia vera: A case report
Xu L, Lu LL, Gao JD
- 12000** Vitreous amyloidosis caused by a Lys55Asn variant in transthyretin: A case report
Tan Y, Tao Y, Sheng YJ, Zhang CM
- 12007** Endoscopic nasal surgery for mucocoele and pyogenic mucocoele of turbinate: Three case reports
Sun SJ, Chen AP, Wan YZ, Ji HZ
- 12015** Transcatheter arterial embolization for traumatic injury to the pharyngeal branch of the ascending pharyngeal artery: Two case reports
Yunaiyama D, Takara Y, Kobayashi T, Muraki M, Tanaka T, Okubo M, Saguchi T, Nakai M, Saito K, Tsukahara K, Ishii Y, Homma H
- 12022** Retroperitoneal leiomyoma located in the broad ligament: A case report
Zhang XS, Lin SZ, Liu YJ, Zhou L, Chen QD, Wang WQ, Li JY
- 12028** Primary testicular neuroendocrine tumor with liver lymph node metastasis: A case report and review of the literature
Xiao T, Luo LH, Guo LF, Wang LQ, Feng L
- 12036** Endodontic treatment of the maxillary first molar with palatal canal variations: A case report and review of literature
Chen K, Ran X, Wang Y
- 12045** Langerhans cell histiocytosis involving only the thymus in an adult: A case report
Li YF, Han SH, Qie P, Yin QF, Wang HE

LETTER TO THE EDITOR

- 12052** Heart failure with preserved ejection fraction: A distinct heart failure phenotype?
Triposkiadis F, Giamouzis G, Skoularigis J, Xanthopoulos A
- 12056** Insight into appropriate medication prescribing for elderly in the COVID-19 era
Omar AS, Kaddoura R
- 12059** Commentary on "Gallstone associated celiac trunk thromboembolisms complicated with splenic infarction: A case report"
Tokur O, Aydın S, Kantarci M
- 12062** Omicron targets upper airways in pediatrics, elderly and unvaccinated population
Nori W, Ghani Zghair MA

ABOUT COVER

Editorial Board Member of *World Journal of Clinical Cases*, Camelia Cristina Diaconu, FACC, FACP, FESC, MHSc, PhD, Associate Professor, Department of Internal Medicine, "Carol Davila" University of Medicine and Pharmacy, Clinical Emergency Hospital of Bucharest, Bucharest 014461, Romania. drcameliadiaconu@gmail.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 abstracted and indexed in Science Citation Index Expanded (SCIE, also known as SciSearch®), Journal Citation Reports/Science Edition, Current Contents®/Clinical Medicine, PubMed, PubMed Central, Scopus, Reference Citation Analysis, China National Knowledge Infrastructure, China Science and Technology Journal Database, and Superstar Journals Database. The 2022 Edition of Journal Citation Reports® cites the 2021 impact factor (IF) for WJCC as 1.534; IF without journal self cites: 1.491; 5-year IF: 1.599; Journal Citation Indicator: 0.28; Ranking: 135 among 172 journals in medicine, general and internal; and Quartile category: Q4. The WJCC's CiteScore for 2021 is 1.2 and Scopus CiteScore rank 2021: General Medicine is 443/826.

RESPONSIBLE EDITORS FOR THIS ISSUE

Production Editor: Hua-Ge Yin; Production Department Director: Xu Guo; 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

November 16, 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.f6publishing.com>



Brachiocephalic to left brachial vein thrombotic vasculitis accompanying mediastinal pancreatic fistula: A case report

Reiji Kokubo, Daisuke Yunaiyama, Yu Tajima, Natsumi Kugai, Mitsuru Okubo, Kazuhiro Saito, Takayoshi Tsuchiya, Takao Itoi

Specialty type: Medicine, research and experimental

Provenance and peer review: Unsolicited article; Externally peer reviewed.

Peer-review model: Single blind

Peer-review report's scientific quality classification

Grade A (Excellent): A

Grade B (Very good): 0

Grade C (Good): C

Grade D (Fair): 0

Grade E (Poor): 0

Received: May 24, 2022

Peer-review started: May 24, 2022

First decision: August 21, 2022

Revised: August 29, 2022

Accepted: October 9, 2022

Article in press: October 9, 2022

Published online: November 16, 2022



Reiji Kokubo, Daisuke Yunaiyama, Yu Tajima, Natsumi Kugai, Mitsuru Okubo, Kazuhiro Saito, Department of Radiology, Tokyo Medical University, Tokyo 160-0023, Japan

Takayoshi Tsuchiya, Takao Itoi, Department of Gastroenterology and Hepatology, Tokyo Medical University, Tokyo 160-0023, Japan

Corresponding author: Daisuke Yunaiyama, MD, PhD, Assistant Professor, Department of Radiology, Tokyo Medical University, 6-7-1 Nishishinjuku, Shinjuku-ku, Tokyo 160-0023, Japan. yuunai@tokyo-med.ac.jp

Abstract

BACKGROUND

Pancreatitis is a severe inflammatory pancreatic disease commonly due to bile duct stones or excessive alcohol usage, with clinical manifestations of abdominal pain, nausea, fever, and fluid collections. Healthy persons with less symptomatic pancreatitis are quite rare. Herein, we report a case of a patient with an undetermined onset of pancreatitis mimicking left arm cellulitis due to thrombotic vasculitis of the brachiocephalic vein.

CASE SUMMARY

A 50-year-old woman visited our hospital for tenderness in the left arm over several recent days. She was diagnosed with cellulitis on the left arm due to left elbow tenderness. Intravenous antibiotics administration did not improve symptoms and laboratory data worsened; thus, chest and abdominal computed tomography (CT) was performed. CT demonstrated pancreatitis with pseudocyst around the pancreas extending to the mediastinum. Thrombotic vasculitis of the brachiocephalic to left brachial vein was observed, which could be the cause of left elbow pain. A pancreatic fistula was found in the head of the pancreas by endoscopic retrograde cholangiopancreatography, so a pancreatic cyst drainage tube *via* the duodenum was placed in the pseudocyst. Cyst content culture was positive for *Escherichia coli* infection. Clinical symptoms, imaging findings, and inflammatory reactions resolved gradually after starting therapeutic intervention. The mediastinal pancreatic pseudocysts shrunk, and the venous thrombi remained but shrunk.

CONCLUSION

The case of a patient with pancreatitis with an undetermined onset that mimics

left arm cellulitis is reported. Deep vein thrombosis should be kept in mind when treating patients with severe inflammatory disease.

Key Words: Pancreatic fistula; Thrombotic vasculitis; Pancreatitis; Computed tomography; Case report

©The Author(s) 2022. Published by Baishideng Publishing Group Inc. All rights reserved.

Core Tip: Pancreatitis is a severe inflammatory disease commonly caused by bile duct stones or alcohol usage, with clinical manifestations of abdominal pain, nausea, fever, fluid collections, *etc.* Because of its severity, it is rare to experience patients with less symptomatic pancreatitis. Herein, a 50-year-old Japanese woman was referred to our hospital due to a history of cough and fatigue for 2 mo and recent left elbow tenderness. Computed tomography showed pancreatic pseudocysts in adjacent tissues and mediastinum, with thrombotic vasculitis in the brachiocephalic to left brachial vein. A history of pancreatitis might cause systemic coagulopathy, which may result in brachiocephalic vein thrombosis.

Citation: Kokubo R, Yunaiyama D, Tajima Y, Kugai N, Okubo M, Saito K, Tsuchiya T, Itoi T. Brachiocephalic to left brachial vein thrombotic vasculitis accompanying mediastinal pancreatic fistula: A case report. *World J Clin Cases* 2022; 10(32): 11882-11888

URL: <https://www.wjgnet.com/2307-8960/full/v10/i32/11882.htm>

DOI: <https://dx.doi.org/10.12998/wjcc.v10.i32.11882>

INTRODUCTION

Pancreatitis is a severe inflammatory pancreatic disease commonly due to bile duct stones or alcohol usage, with clinical manifestations of abdominal pain, nausea, fever, fluid collections, *etc*[1]. Acute or chronic pancreatitis is at risk of pancreatic fistula to adjacent tissues, and it might extend to the mediastinum through the esophageal hiatus or aortic hiatus, which is called mediastinal pancreatic pseudocyst (MPP)[2,3]. The notifying signs of MPP include chest pain, dyspnea, and systemic inflammatory changes, and diagnostic imaging modalities like computed tomography (CT) or magnetic resonance imaging (MRI) have an enormous role for its definitive diagnosis[4,5]. Rare types of signs of MPP-like pancreatic panniculitis[6], multiple ascending aortic mural thrombi[7], or symmetrical peripheral gangrene[8] were also reported; however, no case of MPP accompanying brachiocephalic thrombotic vasculitis has been reported. Herein, we present of a case of a patient with an undetermined onset of pancreatitis that resulted in MPP with brachiocephalic vein thrombotic vasculitis mimicking left arm cellulitis.

CASE PRESENTATION

Chief complaints

A 50-year-old Japanese woman with left elbow tenderness for several days was referred to the department of dermatology of our hospital.

History of present illness

She suffered from cough at night and exertional dyspnea for more than six months, bilateral lower extremity edema for two months, and fatigue, which worsened in recent months. Left elbow tenderness was also noted, so she was referred to the department of dermatology of our hospital.

History of past illness

The patient's medical history included epilepsy.

Personal and family history

The patient had no family history of similar illnesses.

Physical examination

Her body temperature was 38.9 °C, with a heart rate of 150/min, blood pressure of 120/85 mmHg, respiratory rate of 20/min, and SpO₂ of 98% at room air. Tender, erythematous, and edematous left arm was observed (Figure 1).



DOI: 10.12998/wjcc.v10.i32.11882 Copyright ©The Author(s) 2022.

Figure 1 Swelling and redness on the patient's left arm.

Laboratory examinations

The following results were observed at the initial examination: White blood cell count, 14600/ μ L (segmented, 84.9%); red blood cell count, 322×10^4 / μ L; hemoglobin level, 10.6 g/dL; platelet count, 53.1×10^4 /uL; total protein level, 4.7 g/dL; albumin level, 1.8 g/dL; total bilirubin level, 0.35 mg/dL; aspartate aminotransferase, 16 U/L; alanine aminotransferase, 10 U/L; γ -glutamyl transpeptidase, 52 IU/L; lactate dehydrogenase, 269 IU/L; alkaline phosphatase, 352 IU/L; urea nitrogen, 8.8 mg/dL; creatinine, 0.49 mg/dL; creatine kinase, 26 U/L; uremic acid, 4.2 mg/dL; Na, 133 mmol/L; K, 3.6 mmol/L; Cl, 102 mmol/L; c-reaction protein, 22.0 mg/dL; and D-dimer, 12.7 μ g/mL.

Imaging examinations

The CT demonstrated pancreatitis with pseudocysts around the pancreas (Figure 2A) extending to the mediastinum (Figure 2B). Thrombotic vasculitis of the brachiocephalic to left brachial vein was also observed (Figure 2C), which was considered to be the cause of elbow pain. MPP was not seen around the brachiocephalic vein; however, it was compressed between the sternal bone and brachial artery (Figure 3). A pancreatic fistula was found in the head of the pancreas by endoscopic retrograde cholangiopancreatography (ERCP), so a pancreatic cyst drainage tube *via* the duodenum was placed in the pseudocyst (Figure 4).

FINAL DIAGNOSIS

During the next CT scan, the amylase concentration was 1108 U/L; therefore, a final diagnosis of brachiocephalic to left brachial vein thrombotic vasculitis with pancreatic pseudocysts in adjacent tissues of the pancreas and mediastinum was made.

TREATMENT

The pseudocyst around the head of the pancreas was drained with the tube inserted by ERCP. The culture of the cyst contents was positive for *E. coli* infection. MRI of MPP did not show any infection; thus, the patient was followed up with conservative treatment with antibiotics. MPP was followed up with conservative treatment with antibiotics for 32 d along with intravenous administration of heparin with 12000 U/day for 25 d and octreotide acetate for 24 d. The activated partial thromboplastin time was maintained at 38–42 s.

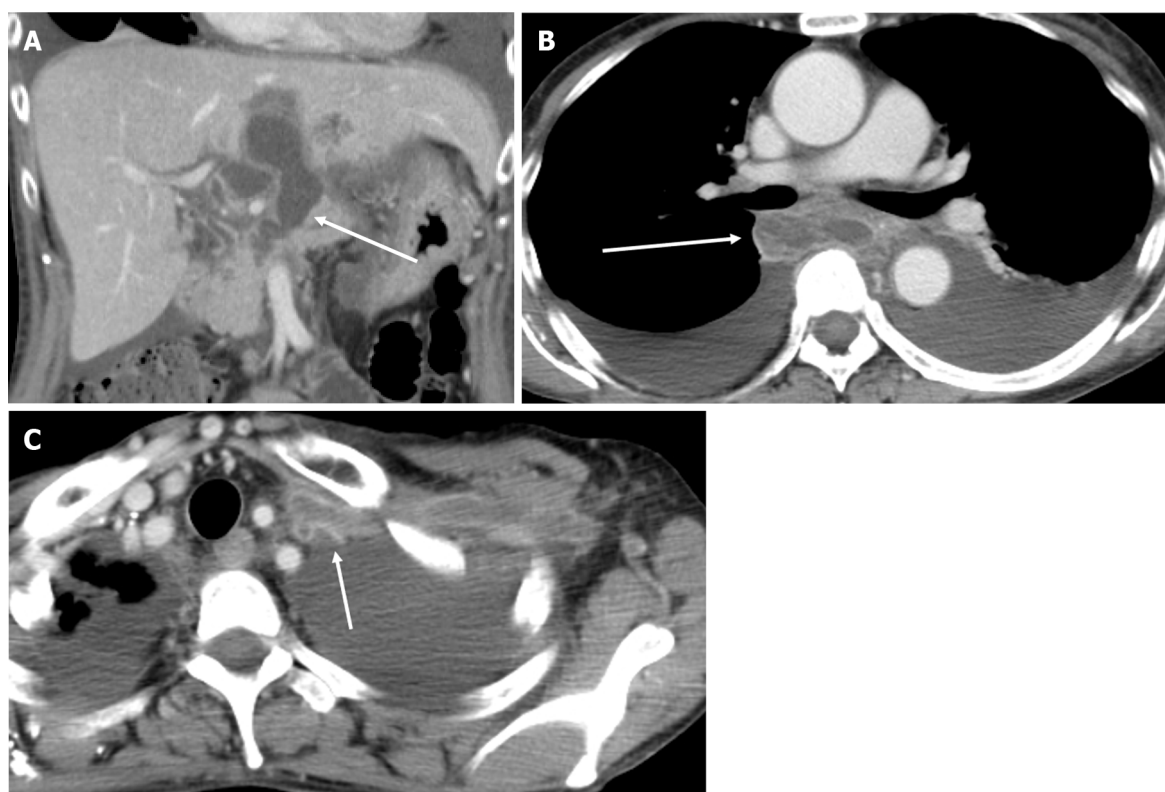
OUTCOME AND FOLLOW-UP

The clinical symptoms, imaging findings, and inflammatory reactions of acute pancreatitis were resolved, the MPPs shrunk, and the venous thrombi remained but shrunk. Table 1 summarizes the clinical course of the patient.

Table 1 Summary of the clinical course of the patient

Time point	Remarks
July 24, 2017	Redness of the bilateral auricles
July 27, 2017	Antibiotics administration at a clinician
August 10, 2017	Referred to our hospital
August 18, 2017	Non-contrast-enhanced chest to abdominal CT without significant findings
August 20, 2017	Biopsy for auricular cartilage
August 21, 2017	Contrast-enhanced head and neck MRI with presenting figures Prednisolone administration was started
September 1, 2017	Symptoms and laboratory abnormality improved remarkably

CT: Computed tomography; MRI: Magnetic resonance imaging.

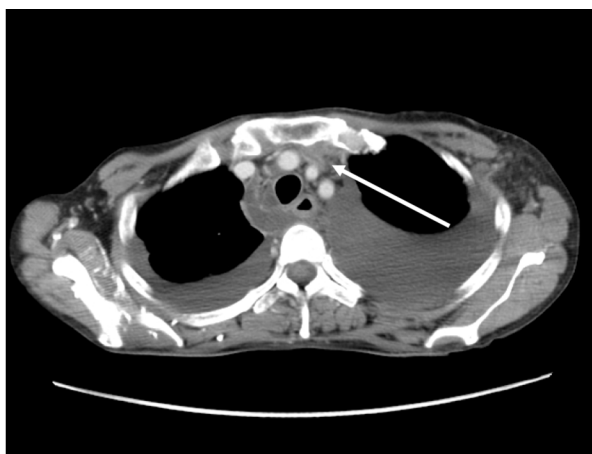


DOI: 10.12998/wjcc.v10.i32.11882 Copyright ©The Author(s) 2022.

Figure 2 Contrast-enhanced computed tomography image. A: Contrast-enhanced computed tomography image at the level of fluid collection around the head of the pancreas (arrow); B: Contrast-enhanced computed tomography image at the level of the mediastinal pseudopancreatic cyst (arrow); C: Contrast-enhanced computed tomography image at the level of brachiocephalic to brachial vein thrombotic vasculitis with contrast-enhancing vessel walls, suggesting inflammatory changes (arrow).

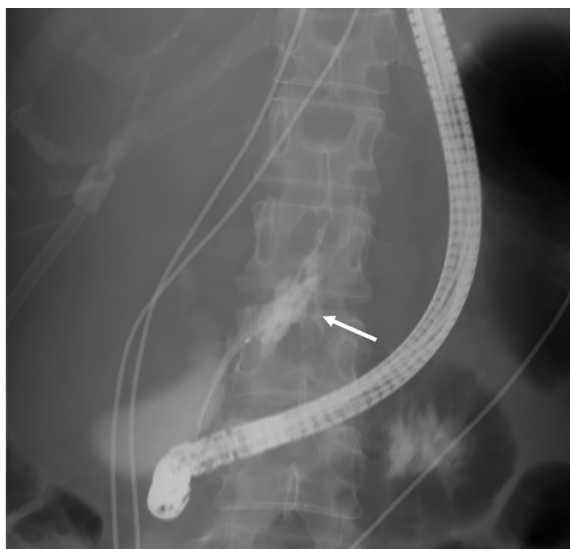
DISCUSSION

This is the first case report presenting a patient with brachiocephalic vein accompanying MPPs. MPPs are rarely found as a complication of acute pancreatitis, as first described by Clauss *et al*[9]. Case reports about MPPs have been accumulated in recent years; however, to the best of our knowledge, there was no report on patients with a chief complaint of left arm tenderness derived from brachiocephalic to brachial vein thrombotic vasculitis. We could find a case report of a patient with multiple ascending aortic mural thrombi and acute necrotizing mediastinitis secondary to acute pancreatitis[7]. The patient had acute pancreatitis with extended inflammation to the mediastinum, resulting in aortitis with thrombi. In contrast, in our case, the MPPs did not reach the brachiocephalic vein, so a direct inflammatory infiltration from the MPPs cannot be assumed.



DOI: 10.12998/wjcc.v10.i32.11882 Copyright ©The Author(s) 2022.

Figure 3 Contrast-enhanced axial computed tomography image showing the compressed brachiocephalic vein (arrow) with thrombosis between the sternal bone and brachial artery. No mediastinal pancreatic pseudocysts were seen around the structure.



DOI: 10.12998/wjcc.v10.i32.11882 Copyright ©The Author(s) 2022.

Figure 4 Endoscopic retrograde cholangiopancreatography demonstrates the pancreatic fistula (arrow).

There were case series reports of patients with splanchnic vein thrombosis and acute pancreatitis[10-12]. It was reported that the coagulopathy might have an effect on forming thrombi. In addition, the compression by MPPs to adjacent veins resulted in flow deficiency and coagulation[13,14]. The possible causes of thrombosis in the brachiocephalic vein, in this case, were as follows: Brachiocephalic vein stenosis due to compression of the brachiocephalic vein between the sternal body and aortic branches, resulting in systemic coagulopathy due to MPPs for an undetermined period, and edematous changes in the mediastinal tissues. Because the onset of pancreatitis in this patient is unknown, it is not clear whether systemic inflammation affected coagulopathy. Based on the presence of coagulopathy due to systemic inflammation, anatomical stenosis would be an additional cause of thrombotic vasculitis.

Panniculitis is a presenting type of pancreatic lesions derived from pancreatic enzyme migration into the systemic circulation that occur in systemic cutaneous inflammation[15]. In patients with subcutaneous inflammatory changes and pancreatitis, panniculitis should be considered; however, because panniculitis usually occurs systemically, our case was suspected to have cellulitis on the left upper arm. The original symptoms of our case were associated with brachiocephalic to left brachial vein thrombosis, so the diagnosis of our case cannot be panniculitis derived from pancreatic enzyme leakage. The D-dimer level of the patient was elevated to 12.7 $\mu\text{g/mL}$. Thus, an evaluation for deep vein thrombosis might be considered, as the patient suffered from severe inflammatory disease with elevated D-dimer count.

In this case, the MPP was detected because the dermatologist who examined the patient considered the inflammatory change to be relatively worse than the severity of the left arm cellulitis. This is an

instructive case demonstrating that it is essential to perform a workup study in patients with suspicious or undetermined unexplainable data.

CONCLUSION

Herein, we report a case of a patient with pancreatitis with an undetermined onset, respiratory syndrome for a few months, and thrombotic vasculitis in the brachiocephalic vein mimicking left arm cellulitis. Long-term pancreatitis might cause systemic coagulopathy that resulted in brachiocephalic vein thrombosis. Deep vein thrombosis should be kept in mind when treating patients with severe inflammatory disease.

FOOTNOTES

Author contributions: Kokubo R and Yunaiyama D designed the report; Kokubo R, Tajima Y, and Kugai N collected the patient's clinical data; Kokubo R, Yunaiyama D, Tajima Y, Kugai N, Okubo M, Saito K, Tsuchiya T, and Itoi T analyzed the data and wrote the paper; and all authors have read and approved the final manuscript.

Informed consent statement: All study participants or their legal guardian provided informed written consent about personal and medical data collection prior to study enrolment.

Conflict-of-interest statement: All the authors report no relevant conflicts of interest for this article.

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: Reiji Kokubo 0000-0002-7270-3800; Daisuke Yunaiyama 0000-0001-6576-5029; Yu Tajima 0000-0001-6645-1216; Natsumi Kugai 0000-0002-5144-6999; Mitsuru Okubo 0000-0002-5870-9202; Kazuhiro Saito 0000-0001-5854-2070; Takayoshi Tsuchiya 0000-0002-2586-0635; Takao Itoi 0000-0002-9433-8437.

Corresponding Author's Membership in Professional Societies: The Japanese Society of Radiology.

REFERENCES

- Rose EA, Haider M, Yang SK, Telmos AJ. Mediastinal extension of a pancreatic pseudocyst. *Am J Gastroenterol* 2000; **95**: 3638-3639 [PMID: 11151907 DOI: 10.1111/j.1572-0241.2000.03387.x]
- Cameron JR. Parental treatment, children's temperament, and the risk of childhood behavioral problems: 2. Initial temperament, parental attitudes, and the incidence and form of behavioral problems. *Am J Orthopsychiatry* 1978; **48**: 140-147 [PMID: 623213 DOI: 10.1111/j.1939-0025.1978.tb01295.x]
- Gupta R, Munoz JC, Garg P, Masri G, Nahman NS Jr, Lambiase LR. Mediastinal pancreatic pseudocyst--a case report and review of the literature. *MedGenMed* 2007; **9**: 8 [PMID: 17955064]
- Andrén-Sandberg A, Dervenis C. Pancreatic pseudocysts in the 21st century. Part I: classification, pathophysiology, anatomic considerations and treatment. *JOP* 2004; **5**: 8-24 [PMID: 14730118]
- Tajima Y, Fukuda K, Tsuneoka N, Tsutsumi R, Kuroki T, Onizuka S, Furui J, Yamanaka S, Makimoto Y, Tsuchiya R, Kanematsu T. Demonstration of a pancreaticopleural fistula with magnetic resonance cholangiopancreatography. *Am J Surg* 2004; **187**: 741-742 [PMID: 15191868 DOI: 10.1016/j.amjsurg.2003.09.008]
- Laureano A, Mestre T, Ricardo L, Rodrigues AM, Cardoso J. Pancreatic panniculitis - a cutaneous manifestation of acute pancreatitis. *J Dermatol Case Rep* 2014; **8**: 35-37 [PMID: 24748910 DOI: 10.3315/jdcr.2014.1167]
- Chong BK, Yun JK, Kim JB, Park DH. Multiple Ascending Aortic Mural Thrombi and Acute Necrotizing Mediastinitis Secondary to Acute Pancreatitis. *Korean J Thorac Cardiovasc Surg* 2016; **49**: 401-404 [PMID: 27734004 DOI: 10.5090/kjtc.2016.49.5.401]
- Liao CY, Huang SC, Lin CH, Wang CC, Liu MY, Ben RJ, Kuo WH, Lee CC. Successful resolution of symmetrical peripheral gangrene after severe acute pancreatitis: a case report. *J Med Case Rep* 2015; **9**: 213 [PMID: 26376919 DOI: 10.1186/s13256-015-0688-3]
- Clauss RH, Wilson DW. Pancreatic pseudocyst of the mediastinum. *J Thorac Surg* 1958; **35**: 795-801 [PMID: 13539922]
- Nawacki L, Matykiewicz J, Stochmal E, Głuszek S. Splanchnic Vein Thrombosis in Acute Pancreatitis and Its

Consequences. *Clin Appl Thromb Hemost* 2021; **27**: 10760296211010260 [PMID: [33887991](#) DOI: [10.1177/10760296211010260](#)]

- 11 **Pancreas Study Group**, Chinese Society of Gastroenterology; Chinese Medical Association. Practice guidance for diagnosis and treatment of pancreatitis-related splanchnic vein thrombosis (Shenyang, 2020). *J Dig Dis* 2021; **22**: 2-8 [PMID: [33215862](#) DOI: [10.1111/1751-2980.12962](#)]
- 12 **Primignani M**. Pancreatitis-related splanchnic vein thrombosis: What role, what warnings for anticoagulation therapy? *J Dig Dis* 2021; **22**: 122-125 [PMID: [33591597](#) DOI: [10.1111/1751-2980.12974](#)]
- 13 **Ahmed SU**, Rana SS, Ahluwalia J, Varma N, Sharma R, Gupta R, Kang M. Role of thrombophilia in splanchnic venous thrombosis in acute pancreatitis. *Ann Gastroenterol* 2018; **31**: 371-378 [PMID: [29720864](#) DOI: [10.20524/aog.2018.0242](#)]
- 14 **Rebours V**, Boudaoud L, Vullierme MP, Vidaud D, Condat B, Hentic O, Maire F, Hammel P, Ruszniewski P, Lévy P. Extrahepatic portal venous system thrombosis in recurrent acute and chronic alcoholic pancreatitis is caused by local inflammation and not thrombophilia. *Am J Gastroenterol* 2012; **107**: 1579-1585 [PMID: [22825367](#) DOI: [10.1038/ajg.2012.231](#)]
- 15 **Poelman SM**, Nguyen K. Pancreatic panniculitis associated with acinar cell pancreatic carcinoma. *J Cutan Med Surg* 2008; **12**: 38-42 [PMID: [18258147](#) DOI: [10.2310/7750.2007.00032](#)]



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>

