

World Journal of *Clinical Cases*

World J Clin Cases 2023 February 6; 11(4): 719-978



Contents

Thrice Monthly Volume 11 Number 4 February 6, 2023

MINIREVIEWS

- 719 Development and refinement of diagnostic and therapeutic strategies for managing patients with cardiogenic stroke: An arduous journey
Fan ZX, Liu RX, Liu GZ
- 725 Portal vein aneurysm-etiology, multimodal imaging and current management
Kurtcehajic A, Zerem E, Alibegovic E, Kunosic S, Hujdurovic A, Fejzic JA

ORIGINAL ARTICLE

Clinical and Translational Research

- 738 CD93 serves as a potential biomarker of gastric cancer and correlates with the tumor microenvironment
Li Z, Zhang XJ, Sun CY, Fei H, Li ZF, Zhao DB

Retrospective Study

- 756 Chest computed tomography findings of the Omicron variants of SARS-CoV-2 with different cycle threshold values
Ying WF, Chen Q, Jiang ZK, Hao DG, Zhang Y, Han Q
- 764 Major depressive disorders in patients with inflammatory bowel disease and rheumatoid arthritis
Haider MB, Basida B, Kaur J
- 780 Selective laser trabeculoplasty as adjunctive treatment for open-angle glaucoma *vs* following incisional glaucoma surgery in Chinese eyes
Zhu J, Guo J
- 788 Efficacy of transvaginal ultrasound-guided local injections of absolute ethanol for ectopic pregnancies with intrauterine implantation sites
Kakinuma T, Kakinuma K, Matsuda Y, Yanagida K, Ohwada M, Kaijima H

Clinical Trials Study

- 797 Efficacy of incremental loads of cow's milk as a treatment for lactose malabsorption in Japan
Hasegawa M, Okada K, Nagata S, Sugihara S

Observational Study

- 809 Transdiagnostic considerations of mental health for the post-COVID era: Lessons from the first surge of the pandemic
Goldstein Ferber S, Shoval G, Rossi R, Trezza V, Di Lorenzo G, Zalsman G, Weller A, Mann JJ
- 821 Effect of patient COVID-19 vaccine hesitancy on hospital care team perceptions
Caspi I, Freund O, Pines O, Elkana O, Ablin JN, Bornstein G

Randomized Clinical Trial

- 830 Improvement of inflammatory response and gastrointestinal function in perioperative of cholelithiasis by Modified Xiao-Cheng-Qi decoction
Sun BF, Zhang F, Chen QP, Wei Q, Zhu WT, Ji HB, Zhang XY

CASE REPORT

- 844 Metagenomic next-generation sequencing for pleural effusions induced by viral pleurisy: A case report
Liu XP, Mao CX, Wang GS, Zhang MZ
- 852 *Clostridium perfringens* gas gangrene caused by closed abdominal injury: A case report and review of the literature
Li HY, Wang ZX, Wang JC, Zhang XD
- 859 Is lymphatic invasion of microrectal neuroendocrine tumors an incidental event?: A case report
Ran JX, Xu LB, Chen WW, Yang HY, Weng Y, Peng YM
- 866 *Pneumocystis jirovecii* diagnosed by next-generation sequencing of bronchoscopic alveolar lavage fluid: A case report and review of literature
Cheng QW, Shen HL, Dong ZH, Zhang QQ, Wang YF, Yan J, Wang YS, Zhang NG
- 874 Identification of 1q21.1 microduplication in a family: A case report
Huang TT, Xu HF, Wang SY, Lin WX, Tung YH, Khan KU, Zhang HH, Guo H, Zheng G, Zhang G
- 883 Double pigtail catheter reduction for seriously displaced intravenous infusion port catheter: A case report
Liu Y, Du DM
- 888 Thyroid storm in a pregnant woman with COVID-19 infection: A case report and review of literatures
Kim HE, Yang J, Park JE, Baek JC, Jo HC
- 896 Computed tomography diagnosed left ovarian venous thrombophlebitis after vaginal delivery: A case report
Wang JJ, Hui CC, Ji YD, Xu W
- 903 Preoperative 3D reconstruction and fluorescent indocyanine green for laparoscopic duodenum preserving pancreatic head resection: A case report
Li XL, Gong LS
- 909 Unusual presentation of systemic lupus erythematosus as hemophagocytic lymphohistiocytosis in a female patient: A case report
Peng LY, Liu JB, Zuo HJ, Shen GF
- 918 Polyarteritis nodosa presenting as leg pain with resolution of positron emission tomography-images: A case report
Kang JH, Kim J
- 922 Easily misdiagnosed complex Klippel-Trenaunay syndrome: A case report
Li LL, Xie R, Li FQ, Huang C, Tuo BG, Wu HC

- 931** Benign lymphoepithelial cyst of parotid gland without human immunodeficiency virus infection: A case report
Liao Y, Li YJ, Hu XW, Wen R, Wang P
- 938** Epithelioid trophoblastic tumor of the lower uterine segment and cervical canal: A case report
Yuan LQ, Hao T, Pan GY, Guo H, Li DP, Liu NF
- 945** Treatment of portosystemic shunt-borne hepatic encephalopathy in a 97-year-old woman using balloon-occluded retrograde transvenous obliteration: A case report
Nishi A, Kenzaka T, Sogi M, Nakaminato S, Suzuki T
- 952** Development of Henoch-Schoenlein purpura in a child with idiopathic hypereosinophilia syndrome with multiple thrombotic onset: A case report
Xu YY, Huang XB, Wang YG, Zheng LY, Li M, Dai Y, Zhao S
- 962** Three cases of jejunal tumors detected by standard upper gastrointestinal endoscopy: A case series
Lee J, Kim S, Kim D, Lee S, Ryu K
- 972** Omental infarction diagnosed by computed tomography, missed with ultrasonography: A case report
Hwang JK, Cho YJ, Kang BS, Min KW, Cho YS, Kim YJ, Lee KS

ABOUT COVER

Editorial Board Member of *World Journal of Clinical Cases*, Sahand Samieirad, DDS, MS, MSc, Associate Professor, Oral and Maxillofacial Surgery Department, Mashhad Dental School, Mashhad University of Medical Sciences, Mashhad 9178613111, Iran. samieerads@mums.ac.ir

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: Si Zhao; 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

February 6, 2023

COPYRIGHT

© 2023 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>



Polyarteritis nodosa presenting as leg pain with resolution of positron emission tomography-images: A case report

Ji-Hyoun Kang, Jahae Kim

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

P-Reviewer: Wang T, China

Received: September 27, 2022

Peer-review started: September 27, 2022

First decision: December 13, 2022

Revised: December 13, 2022

Accepted: January 12, 2023

Article in press: January 12, 2023

Published online: February 6, 2023



Ji-Hyoun Kang, Division of Rheumatology, Department of Internal Medicine, Chonnam National University Medical School & Hospital, Gwangju 61469, South Korea

Jahae Kim, Department of Nuclear Medicine, Chonnam National University Hospital & Medical School, Gwangju 61469, South Korea

Corresponding author: Ji-Hyoun Kang, MD, PhD, Associate Professor, Division of Rheumatology, Department of Internal Medicine, Chonnam National University Medical School & Hospital, 42 Jebong-ro, Dong-gu, Gwangju 61469, South Korea.
romi918@naver.com

Abstract

BACKGROUND

Although fluorodeoxyglucose-positron emission tomography/computed tomography (FDG-PET/CT) is widely used for diagnosis and follow-up of large sized vessel vasculitis, it is still not widely used for small to medium sized vessel vasculitis.

CASE SUMMARY

This is the case of a 68-year-old male who presented at the emergency department complaining of fever, myalgia, and bilateral leg pain of over two weeks duration, with elevated levels of C-reactive protein. He was subsequently admitted and despite the absence of clinically significant findings, the patient continued to exhibit recurrent fever. A fever of unknown origin workup, which included imaging studies using FDG-PET/CT, revealed vasculitis involving small to medium-sized vessels of both lower extremities, demonstrated by linear hypermetabolism throughout the leg muscles. The patient was treated with methylprednisolone and methotrexate after diagnosis leading to the gradual resolution of the patient's symptoms. Three weeks later, a follow-up FDG-PET/CT was performed. Previously hypermetabolic vessels were markedly improved.

CONCLUSION

Our case report demonstrated that FDG-PET/CT has tremendous potential to detect medium-sized vessel inflammation; it can also play a crucial role in prognosticating outcomes and monitoring therapeutic efficacy.

Key Words: Positron emission tomography-computed tomography; Polyarteritis nodosa;

Case report

©The Author(s) 2023. Published by Baishideng Publishing Group Inc. All rights reserved.

Core Tip: The fluorodeoxyglucose-positron emission tomography/computed tomography can be an option to diagnose small to medium-sized vessel vasculitis and follow-up to assess on the extent and improvement of inflammation in patients with polyarteritis nodosa.

Citation: Kang JH, Kim J. Polyarteritis nodosa presenting as leg pain with resolution of positron emission tomography-images: A case report. *World J Clin Cases* 2023; 11(4): 918-921

URL: <https://www.wjgnet.com/2307-8960/full/v11/i4/918.htm>

DOI: <https://dx.doi.org/10.12998/wjcc.v11.i4.918>

INTRODUCTION

Polyarteritis nodosa (PAN) is characterized by systemic necrotizing vasculitis which can involve medium-sized vessels. This vasculitis is usually difficult to diagnose, thus, imaging study including fluorodeoxyglucose-positron emission tomography/ computed tomography (FDG-PET/CT) would be a possible role to identify this disease.

CASE PRESENTATION

Chief complaints

A 68-year-old male visited to emergency department complaining fever, myalgia, and both leg pain during more than two weeks.

History of present illness

Although he was treated with administered ceftriaxone and metronidazole in other hospital for a week.

History of past illness

There was no specific past illness.

Personal and family history

There was no specific personal and family history.

Physical examination

However, his C-reactive protein (CRP) was still high (37.71 mg/dL) and complaining symptoms such as fever, both leg pain was still remained. Therefore, he was admitted to our hospital for further assessment.

Laboratory examinations

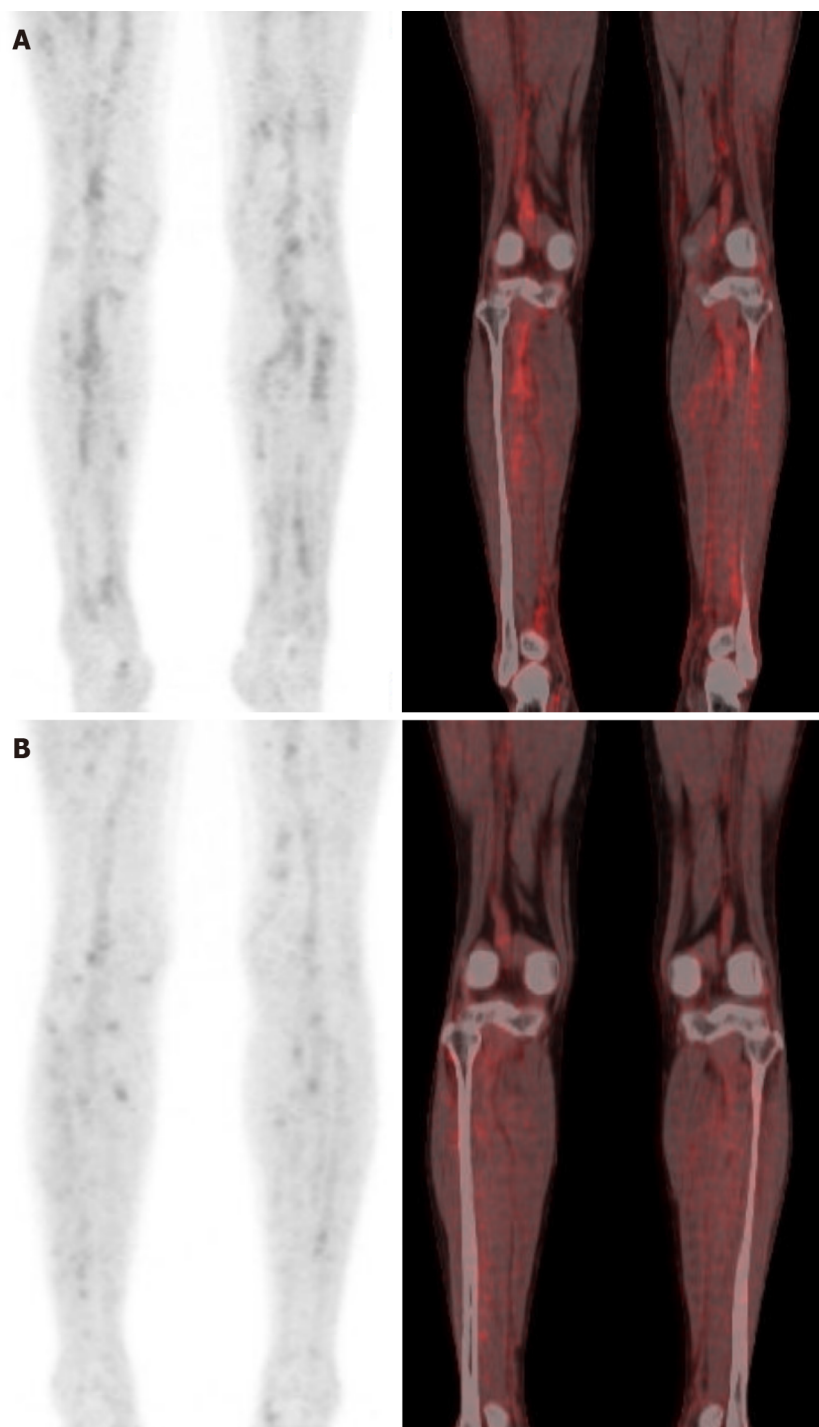
His blood, urine culture findings were all negative. And his serologic results such as hepatitis viral marker, rheumatoid factor, anti-cyclic citrullinated peptide antibody, antineutrophil cytoplasmic antibody and anti-nuclear antibody were negative. Because he complained daily fever after admission, fever of unknown origin work up was needed.

Imaging examinations

There were no clinically significant findings without two small hemangiomas in the liver on contrast enhanced computed tomography in whole body including neck, chest, and abdomen-pelvic cavity. FDG-PET/CT on day 5 showed vasculitis involving small to medium vessels of both lower extremities by showing somewhat linear hypermetabolism through the muscles ([Figure 1](#)).

FINAL DIAGNOSIS

Finally, he was diagnosed PAN according to criteria by showing satisfied with unexplained more than 4



DOI: 10.12998/wjcc.v11.i4.918 Copyright ©The Author(s) 2023.

Figure 1 Fluorodeoxyglucose-positron emission tomography/computed tomography. A: Fluorodeoxyglucose-positron emission tomography/computed tomography image showed hypermetabolism in both lower extremities; B: After treatment 3 wk later, lesion was markedly improved.

kg of weight loss, myalgia, new onset more than 90 mmHg of diastolic blood pressure and elevated of blood urea nitrogen > 40mg/dL according to the American College of Rheumatology proposed classification criteria for PAN in 1990[1].

TREATMENT

The patient was treated with more than 1mg/kg dosage of methylprednisolone intravenously and immunosuppressants. The patient was treated with high dosage of prednisolone, and methotrexate after diagnosis.

OUTCOME AND FOLLOW-UP

Then, his symptoms were resolved, and his CRP level was 1.19 mg/dL. After 3 wk later, he was performed FDG-PET/CT again to identify his vasculitis state. As a result, previous hypermetabolism of vessels were markedly improved. After resolution of his symptoms, the patient was tapered glucocorticoids and methotrexate and maintained improved status in outpatient clinic.

DISCUSSION

It is already known that FDG-PET/CT has new diagnostic tool to detect large vessel vasculitis, with its high sensitivity for vessel inflammation[2]. And FDG-PET/CT was shown possibility as a promising prognostic marker by identification of patients having risk of vascular complications. In addition, prior report suggests that FDG-PET/CT can be a role of showing therapeutic efficacy[3].

CONCLUSION

This patient's finding indicates that FDG-PET/CT can be an option to diagnose small to medium vessels vasculitis and follow-up to evaluated on the extent and improvement of vessel inflammation in patients with PAN to show therapeutic effects.

FOOTNOTES

Author contributions: Kang JH designed the research study, performed the research, analyzed the data and wrote the manuscript; Kim JH performed the research; All authors have read and approve the final manuscript.

Informed consent statement: Informed written consent was obtained from the patient for publication of this report and any accompanying images.

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

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: South Korea

ORCID number: Ji-Hyoun Kang 0000-0003-1113-2001.

S-Editor: Liu GL

L-Editor: A

P-Editor: Liu GL

REFERENCES

- 1 **Lightfoot RW Jr, Michel BA, Bloch DA, Hunder GG, Zvaifler NJ, McShane DJ, Arend WP, Calabrese LH, Leavitt RY, Lie JT.** The American College of Rheumatology 1990 criteria for the classification of polyarteritis nodosa. *Arthritis Rheum* 1990; **33**: 1088-1093 [PMID: 1975174 DOI: 10.1002/art.1780330805]
- 2 **Slart RHJA;** Writing group; Reviewer group; Members of EANM Cardiovascular; Members of EANM Infection & Inflammation; Members of Committees, SNMMI Cardiovascular; Members of Council, PET Interest Group; Members of ASNC; EANM Committee Coordinator. FDG-PET/CT(A) imaging in large vessel vasculitis and polymyalgia rheumatica: joint procedural recommendation of the EANM, SNMMI, and the PET Interest Group (PIG), and endorsed by the ASNC. *Eur J Nucl Med Mol Imaging* 2018; **45**: 1250-1269 [PMID: 29637252 DOI: 10.1007/s00259-018-3973-8]
- 3 **Pelletier-Galarneau M, Ruddy TD.** PET/CT for Diagnosis and Management of Large-Vessel Vasculitis. *Curr Cardiol Rep* 2019; **21**: 34 [PMID: 30887249 DOI: 10.1007/s11886-019-1122-z]



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>

