

World Journal of *Clinical Cases*

World J Clin Cases 2024 November 16; 12(32): 6517-6579



EDITORIAL

- 6517 Foregut tuberculosis: Too close but miles apart
Shahid Y, Anis MA, Abid S
- 6526 Diagnostic and therapeutic challenges of myeloid sarcoma in the oral cavity
Martínez Nieto M, González Gómez LA, Gómez Mireles JC, Lomeli Martínez SM
- 6534 Evolving of treatment options for cerebral infarction
Cao QY, Li Z
- 6538 Timing impact on the initiation of pirfenidone therapy on idiopathic pulmonary fibrosis disease progression
Mohamed BME, Abdelrahim MEA
- 6543 Advanced lung adenocarcinoma with *EGFR* 19-del mutation transforms into squamous cell carcinoma after *EGFR* tyrosine kinase inhibitor treatment
Qi RB, Wu ZH
- 6547 Managing uterine artery pseudoaneurysm post-hysteroscopic surgery: Clinical insights and future directions
Cheng CH, Hao WR, Cheng TH

CASE REPORT

- 6551 Immunoglobulin G4-related spinal pachymeningitis: A case report
Chae TS, Kim DS, Kim GW, Won YH, Ko MH, Park SH, Seo JH

LETTER TO THE EDITOR

- 6559 Classification and detection of dental images using meta-learning
Yadalam PK, Aneundi RV, Alarcón-Sánchez MA, Heboyan A
- 6563 Revisiting tuberculosis as a cause of gastric outlet obstruction: Insights from a case report
Meng J, Zhang LM, Wang ZG, Zhao X, Bai HX, Wang Y, Chen DY, Liu DL, Ji CC, Liu Y, Wang L, Li BY, Yin ZT
- 6566 Butorphanol in epidural: Could this be the breakthrough solution for safe and effective labor analgesia that we've been waiting for?
Gupta A, Valecha B, Gupta N
- 6570 Optimal traditional Chinese medicine formulas in treating ulcerative colitis: Choose one or take it all?
Zeng Y, Zhang JW, Yang J

6575 Virtual reality: The bridge between medical education and clinical practice

Liu YQ

ABOUT COVER

Peer Reviewer of *World Journal of Clinical Cases*, Dimitra Bacharaki, MD, PhD, Consultant Physician-Scientist, Department of Nephrology, Attikon University Hospital, Chaidari 12462, Greece. bacharaki@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 PubMed, PubMed Central, *Reference Citation Analysis*, China Science and Technology Journal Database, and Superstar Journals Database. The 2024 Edition of Journal Citation Reports® cites the 2023 journal impact factor (JIF) for *WJCC* as 1.0; JIF without journal self cites: 0.9; 5-year JIF: 1.1; JIF Rank: 168/325 in medicine, general and internal; JIF Quartile: Q3; and 5-year JIF Quartile: Q3.

RESPONSIBLE EDITORS FOR THIS ISSUE

Production Editor: Xiang-Di Zhang; Production Department Director: Xu Guo; Cover Editor: 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, Salim Surani, Jerzy Tadeusz Chudek, George Kontogeorgos, Maurizio Serati

EDITORIAL BOARD MEMBERS

<https://www.wjgnet.com/2307-8960/editorialboard.htm>

PUBLICATION DATE

November 16, 2024

COPYRIGHT

© 2024 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>

Managing uterine artery pseudoaneurysm post-hysteroscopic surgery: Clinical insights and future directions

Chun-Han Cheng, Wen-Rui Hao, Tzu-Hung Cheng

Specialty type: Medicine, research and experimental

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

Peer-review model: Single blind

Peer-review report's classification

Scientific Quality: Grade C

Novelty: Grade B

Creativity or Innovation: Grade B

Scientific Significance: Grade B

P-Reviewer: Adam CA

Received: July 9, 2024

Revised: July 29, 2024

Accepted: July 31, 2024

Published online: November 16, 2024

Processing time: 75 Days and 21.3 Hours



Chun-Han Cheng, Department of Medical Education, Linkou Chang Gung Memorial Hospital, Taoyuan 33305, Taiwan

Wen-Rui Hao, Division of Cardiology, Department of Internal Medicine, Shuang Ho Hospital, Ministry of Health and Welfare, Taipei Medical University, New Taipei 23561, Taiwan

Wen-Rui Hao, Division of Cardiology, Department of Internal Medicine, School of Medicine, College of Medicine, Taipei Medical University, Taipei 11002, Taiwan

Tzu-Hung Cheng, Department of Biochemistry, School of Medicine, College of Medicine, China Medical University, Taichung 404328, Taiwan

Co-first authors: Chun-Han Cheng and Wen-Rui Hao.

Corresponding author: Tzu-Hung Cheng, PhD, Professor, Department of Biochemistry, School of Medicine, College of Medicine, China Medical University, No. 91 Xueshi Road, North District, Taichung 404328, Taiwan. thcheng@mail.cmu.edu.tw

Abstract

This editorial discusses the case report by Kakinuma *et al*, which details a rare occurrence of uterine artery pseudoaneurysm following hysteroscopic surgery. The case highlights diagnostic challenges and management strategies for this uncommon complication. The editorial explores the implications for clinical practice, emphasizing the importance of early recognition and appropriate intervention to prevent potential severe outcomes. Future research directions to increase the understanding and management of uterine artery pseudoaneurysm in similar clinical settings.

Key Words: Uterine artery pseudoaneurysm; Hysteroscopic surgery; Vascular complications; Intervention implications; Case report

©The Author(s) 2024. Published by Baishideng Publishing Group Inc. All rights reserved.

Core Tip: Careful post-hysteroscopic surveillance is crucial for the early detection and management of uterine artery pseudoaneurysms. This underscores the necessity for informed clinical decision-making and comprehensive patient counseling.

Citation: Cheng CH, Hao WR, Cheng TH. Managing uterine artery pseudoaneurysm post-hysteroscopic surgery: Clinical insights and future directions. *World J Clin Cases* 2024; 12(32): 6547-6550

URL: <https://www.wjgnet.com/2307-8960/full/v12/i32/6547.htm>

DOI: <https://dx.doi.org/10.12998/wjcc.v12.i32.6547>

INTRODUCTION

Uterine artery pseudoaneurysm (UAP) is a rare yet potentially life-threatening complication following hysteroscopic surgery. It generally results from iatrogenic trauma to the uterine artery during the procedure[1]. The case report by Kakinuma *et al*[1], published in the *World Journal of Clinical Cases*, detailed a notable instance of UAP that developed after hysteroscopy. This editorial explores the clinical implications of that case, emphasizing the diagnostic challenges, management strategies, and broader implications for patient management.

The diagnosis of UAP can be particularly challenging owing to its nonspecific presentation. UAP often mimics other postoperative complications[2]. Early detection is critical because UAP can progress to severe hemorrhage if left untreated[3]. Some cases of UAP can be managed conservatively, but other approaches including uterine artery embolization or surgical repair may be needed[2,4]. Clinicians performing gynecological surgeries must have a thorough understanding of the risks associated with UAP. Vigilant postoperative monitoring and prompt intervention are essential to prevent severe complications and to optimize patient outcomes[1,3].

CLINICAL PRESENTATION AND DIAGNOSIS

UAP following hysteroscopic surgery presents with a diverse range of clinical manifestations by Kakinuma *et al*[1]. The variable presentation necessitates a high index of suspicion among clinicians for a timely diagnosis, particularly for patients experiencing postoperative symptoms such as vaginal bleeding and abdominal pain or showing signs of hypovolemic shock[3]. Diagnostic imaging is pivotal in confirming UAP and guiding prompt intervention. Ultrasound is usually the initial diagnostic tool because of its availability and its ability to identify pulsatile hypoechoic masses indicative of pseudoaneurysms[5]. Doppler ultrasound further refines the assessment of blood flow patterns within pseudoaneurysms, and computed tomography angiography offers detailed anatomical localization and vascular mapping essential for surgical planning[2].

The published literature describes various clinical presentations and therapies of UAP. For example, Ota *et al*[3] reported successful management using temporary bilateral laparoscopic clamping of the uterine arteries followed by hysteroscopic surgery. Melcer *et al*[4] described a case of conservative management for UAP after cesarean delivery, highlighting the potential for nonsurgical interventions in selected scenarios. Takeda *et al*[6] reported the use of endovascular techniques to manage intractable delayed hemorrhage following laparoscopic-assisted vaginal hysterectomy, underscoring the utility of minimally invasive methods. Early recognition of UAP is crucial for preventing complications such as rupture or severe hemorrhage. Effective management of UAP and, where applicable, preservation of fertility often requires a multidisciplinary approach that combines laparoscopic and hysteroscopic techniques[7,8]. Integration of advanced imaging modalities with clinical expertise is instrumental in ensuring a timely diagnosis and successful management of UAP following hysteroscopic procedures.

MANAGEMENT STRATEGIES AND CHALLENGES

Effective management of UAP following hysteroscopic surgery requires a multidisciplinary approach that combines the expertise of gynecologists, interventional radiologists, and vascular surgeons[1]. Early recognition is crucial, allowing for application of a spectrum of therapeutic strategies ranging from conservative management with close monitoring to more invasive interventions such as embolization and surgical repair[3]. The optimal management strategy depends on various factors, including the clinical presentation, size, and location of the pseudoaneurysm, as well as patient preference[2]. Conservative management involves close observation with serial imaging to monitor pseudoaneurysm stability and regression over time[5]. This method is suitable for patients with minimal symptoms and hemodynamic stability.

The potential for recurrence necessitates individualized treatment plans tailored to each patient's unique circumstances [9]. For cases requiring intervention, minimally invasive techniques such as temporary laparoscopic bilateral clamping of the uterine arteries followed by hysteroscopy have positive outcomes of fertility preservation and reduced surgical morbidity[7,8]. Embolization is an effective method, and is often preferred because it is minimally invasive and can successfully control bleeding and resolve pseudoaneurysms[6]. Published case reports have documented the successful application of these techniques. For example, Ota *et al*[3] described a case where temporary laparoscopic clamping of the uterine arteries followed by hysteroscopic surgery effectively treated UAP, highlighting the importance of preserving reproductive function. Similarly, Wang *et al*[7] reported the effectiveness of devices for manual removal of hysteroscopic tissue in patients with intrauterine pathologies, providing minimal surgical trauma and optimal reproductive outcomes. Although advances in imaging and therapeutic modalities have led to greatly improved outcomes, UAP management remains challenging owing to its variable clinical presentation and potential complications. An individualized,

multidisciplinary approach ensures timely intervention and enhances patient safety and reproductive health outcomes. Tailored approaches address both the immediate risk posed by UAP and optimizes long-term reproductive outcomes for affected patients.

CLINICAL IMPLICATIONS AND FUTURE DIRECTIONS

UAP following hysteroscopic surgery presents a considerable challenge that influences both patient outcomes and the use of healthcare resources. Advances in surgical techniques and imaging protocols have reduced the risk of iatrogenic injury and help to prevent UAP[1]. Enhanced imaging modalities, such as Doppler ultrasound and magnetic resonance imaging, hold promise for improving diagnostic accuracy. That would facilitate early detection and timely intervention, which would improve patient outcomes[3]. Future studies should focus on refining the diagnostic criteria to optimize treatment algorithms and ultimately decrease the risk of UAP recurrence[2]. Prospective studies are needed to elucidate the natural history and long-term outcomes of UAP, particularly regarding reproductive health and fertility preservation[5]. Such investigations will contribute to the development of evidence-based guidelines, ultimately enhancing clinical decision-making in managing this complex condition. Ongoing advancements in diagnostic imaging and therapeutic strategies offer promise for reducing the incidence of UAP following hysteroscopy and improving its management. Collaborative efforts across disciplines are crucial for improving patient care and optimizing outcomes of individuals affected by this condition.

CONCLUSION

The case report by Kakinuma *et al*[1] underscores the importance of vigilance in recognizing and managing UAP, a rare but potentially life-threatening complication following hysteroscopic surgery. UAP has a broad spectrum of clinical presentations, which poses diagnostic challenges. This necessitates a high index of suspicion among clinicians, particularly for patients experiencing postoperative symptoms such as vaginal bleeding or abdominal pain. Management of UAP requires a multidisciplinary approach, including collaboration of gynecologists, interventional radiologists, and vascular surgeons to individualize treatment based on patient factors and clinical severity[3]. Stable patients may benefit from conservative management with close monitoring. However, cases with hemodynamic instability or persistent bleeding often require more aggressive interventions such as embolization and surgical repair[2]. Future research efforts should focus on refining diagnostic protocols to facilitate the early detection of UAP. In addition, optimizing treatment algorithms and conducting prospective studies are crucial for improving long-term patient outcomes and reducing UAP recurrence[5]. Moreover, exploring preventive strategies, including advancements in imaging techniques and procedural modifications, is important to minimize UAP incidence, to address the need for post-hysteroscopic surgery, and to improve patient safety. In conclusion, advancing our understanding of UAP and optimizing its management are crucial for ensuring timely and effective intervention in clinical practice, improving patient outcomes, and reducing the healthcare burden associated with this challenging complication.

FOOTNOTES

Author contributions: Cheng CH, Hao WR, and Cheng TH made important intellectual contributions to this editorial; Cheng CH and Hao WR were primarily responsible for the writing; Cheng TH oversaw revisions of the successive versions; All authors have read and approved the final manuscript. Cheng CH and Hao WR contributed equally to this work as co-first authors in the development and completion of the manuscript. Their collaborative efforts were critical in shaping the editorial's content, analysis, and presentation. Both Cheng CH and Hao WR made substantial intellectual contributions by thoroughly analyzing the case report by Kakinuma *et al.* and providing critical insights into the management of uterine artery pseudoaneurysm (UAP) post-hysteroscopic surgery. Cheng CH and Hao WR were jointly responsible for drafting the initial version of the manuscript, ensuring that the editorial was well-structured and addressed the key aspects of UAP management effectively. They also worked closely on revising the manuscript in response to feedback, incorporating substantial improvements to enhance the clarity and impact of the final submission. The decision to assign co-first authorship reflects the equal level of effort and responsibility undertaken by Cheng CH and Hao WR. Both authors dedicated considerable time and effort to research, writing, and revising the editorial, making indispensable contributions that were instrumental in the manuscript's development.

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

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 of origin: Taiwan

ORCID number: Tzu-Hung Cheng 0000-0002-9155-4169.

S-Editor: Qu XL

L-Editor: Filipodia

P-Editor: Zhang XD

REFERENCES

- 1 **Kakinuma K**, Kakinuma T, Ueyama K, Okamoto R, Yanagida K, Takeshima N, Ohwada M. Uterine artery pseudoaneurysm caused by hysteroscopic surgery: A case report. *World J Clin Cases* 2024; **12(26)**: 5968-5973
- 2 **Crouzat A**, Gauci PA. Treatment of uterine artery (pseudo)aneurysm during pregnancy: A case report and review of the literature. *Eur J Obstet Gynecol Reprod Biol* 2024; **299**: 240-247 [PMID: 38905967 DOI: 10.1016/j.ejogrb.2024.05.046]
- 3 **Ota H**, Fukushi Y, Wada S, Fujino T, Omori Y, Kushima M. Successful treatment of uterine artery pseudoaneurysm with laparoscopic temporary clamping of bilateral uterine arteries, followed by hysteroscopic surgery. *J Obstet Gynaecol Res* 2017; **43**: 1356-1359 [PMID: 28561908 DOI: 10.1111/jog.13357]
- 4 **Melcer Y**, Pekar-Zlotin M, Cherniavsky A, Levinsohn-Tavor O, Copel L, Maymon R. Acquired uterine artery pseudoaneurysm: a rare iatrogenic complication following cesarean delivery at complete cervical dilatation. *Arch Gynecol Obstet* 2024 [PMID: 38953976 DOI: 10.1007/s00404-024-07606-y]
- 5 **Mohr-Sasson A**, Aycock M, Higgason N, Hui M, Bhalwal A, Jalloul R, Leon MG, Dziadek O, Montealegre A. Excess use of surgical supplies in minimally invasive benign gynecology surgery: an observational study. *Am J Obstet Gynecol* 2024; **231**: 273.e1-273.e7 [PMID: 38761838 DOI: 10.1016/j.ajog.2024.05.008]
- 6 **Takeda A**, Nakamura H, Koike W, Nagasaka K. Conservative endovascular management for intractable delayed hemorrhage after laparoscopic-assisted vaginal hysterectomy: Two case reports. *Case Rep Womens Health* 2023; **37**: e00477 [PMID: 36683782 DOI: 10.1016/j.crwh.2023.e00477]
- 7 **Wang C**, Chen H, Morgan I, Prytkova V, Kohl-Thomas B, Parry JP, Lindheim SR. Effectiveness of Manual Hysteroscopic Tissue Removal Device for Intrauterine Polyps in Infertile Women in Both Operating and Office Settings. *J Clin Med* 2024; **13** [PMID: 38673518 DOI: 10.3390/jcm13082244]
- 8 **Malhotra V**, Ennever JF. Determination of the relative detector response for unstable bilirubin photoproducts without isolation. *J Chromatogr* 1986; **383**: 153-157 [PMID: 3818833 DOI: 10.1016/s0378-4347(00)83454-4]
- 9 **Zeng Z**, Shan H, Lin M, Bao S, Mo D, Deng F, Yu Y, Yang Y, Zhou P, Li R. SIRT3 protects endometrial receptivity in patients with polycystic ovary syndrome. *Chin Med J (Engl)* 2024 [PMID: 38721809 DOI: 10.1097/CM9.00000000000003127]



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

