

World Journal of *Clinical Cases*

World J Clin Cases 2022 May 26; 10(15): 4713-5123



Contents

Thrice Monthly Volume 10 Number 15 May 26, 2022

EDITORIAL

- 4713 Diet and intestinal bacterial overgrowth: Is there evidence?

Souza C, Rocha R, Cotrim HP

MINIREVIEWS

- 4717 Definition and classification of acute-on-chronic liver diseases

Zhang YY, Meng ZJ

- 4726 Management of neurosurgical patients during coronavirus disease 2019 pandemics: The Ljubljana, Slovenia experience

Velmar T, Bosnjak R

ORIGINAL ARTICLE

Clinical and Translational Research

- 4737 Glycolytic and fatty acid oxidation genes affect the treatment and prognosis of liver cancer

Zou JY, Huang YJ, He J, Tang ZX, Qin L

- 4761 Detection of a novel panel of 24 genes with high frequencies of mutation in gastric cancer based on next-generation sequencing

Zeng HH, Yang Z, Qiu YB, Bashir S, Li Y, Xu M

Case Control Study

- 4776 Outcomes of cervical degenerative disc disease treated by anterior cervical discectomy and fusion with self-locking fusion cage

Zhang B, Jiang YZ, Song QP, An Y

- 4785 Impact of COVID-19 pandemic on clinicopathological features of transplant recipients with hepatocellular carcinoma: A case-control study

Akbulut S, Sahin TT, Ince V, Yilmaz S

Retrospective Study

- 4799 Risk factors and optimal predictive scoring system of mortality for children with acute paraquat poisoning

Song Y, Wang H, Tao YH

- 4810 Application effect of thoracoscopic tricuspid valvuloplasty in geriatric patients with tricuspid valve disease

Jiang W, Long XM, Wei KQ, Li SC, Zhang Z, He BF, Li H

- 4818 Endoscopic ultrasonography in the evaluation of condition and prognosis of ulcerative colitis

Jin RF, Chen YM, Chen RP, Ye HJ

- 4827** Dynamic interaction nursing intervention on functional rehabilitation and self-care ability of patients after aneurysm surgery

Xie YE, Huang WC, Li YP, Deng JH, Huang JT

Clinical Trials Study

- 4836** Validations of new cut-offs for surgical drains management and use of computerized tomography scan after pancreatoduodenectomy: The DALCUT trial

Caputo D, Coppola A, La Vaccara V, Passa R, Carbone L, Ciccozzi M, Angeletti S, Coppola R

Observational Study

- 4843** Psychosocial adaptation and influencing factors among patients with chemotherapy-induced peripheral neuropathy

Zhou X, Wang DY, Ding CY, Liu H, Sun ZQ

META-ANALYSIS

- 4856** Outcome of the efficacy of Chinese herbal medicine for functional constipation: A systematic review and meta-analysis

Lyu Z, Fan Y, Bai Y, Liu T, Zhong LL, Liang HF

CASE REPORT

- 4878** Familial gastrointestinal stromal tumors with *KIT* germline mutation in a Chinese family: A case report

Yuan W, Huang W, Ren L, Xu C, Luan LJ, Huang J, Xue AW, Fang Y, Gao XD, Shen KT, Lv JH, Hou YY

- 4886** Nonfunctional pancreatic neuroendocrine tumours misdiagnosed as autoimmune pancreatitis: A case report and review of literature

Lin ZQ, Li X, Yang Y, Wang Y, Zhang XY, Zhang XX, Guo J

- 4895** Sudden deafness as a prodrome of cerebellar artery infarction: Three case reports

Li BL, Xu JY, Lin S

- 4904** Importance of abdominal X-ray to confirm the position of levonorgestrel-releasing intrauterine system: A case report

Maebayashi A, Kato K, Hayashi N, Nagaishi M, Kawana K

- 4911** Bedside ultrasonic localization of the nasogastric tube in a patient with severe COVID-19: A case report

Zhu XJ, Liu SX, Li QT, Jiang YJ

- 4917** Paradoxical herniation after decompressive craniectomy provoked by mannitol: A case report

Du C, Tang HJ, Fan SM

- 4923** Targeted next-generation sequencing identifies a novel nonsense mutation in ANK1 for hereditary spherocytosis: A case report

Fu P, Jiao YY, Chen K, Shao JB, Liao XL, Yang JW, Jiang SY

- 4929** Nonfunctional bladder paraganglioma misdiagnosed as hemangioma: A case report

Chen J, Yang HF

- 4935** Special type of Wernekink syndrome in midbrain infarction: Four case reports
Yang YZ, Hu WX, Zhai HJ
- 4942** Primary extraskeletal Ewing's sarcoma of the lumbar nerve root: A case report
Lei LH, Li F, Wu T
- 4949** Yellow nail syndrome accompanied by minimal-change nephrotic syndrome: A case report
Zhang YN, Wang MH, Yu WC, Cheng W, Cong JP, Huang XP, Wang FF
- 4957** Total femur replacement with 18 years of follow-up: A case report
Yang YH, Chen JX, Chen QY, Wang Y, Zhou YB, Wang HW, Yuan T, Sun HP, Xie L, Yao ZH, Yang ZZ
- 4964** Male metaplastic breast cancer with poor prognosis: A case report
Kim HY, Lee S, Kim DI, Jung CS, Kim JY, Nam KJ, Choo KS, Jung YJ
- 4971** CD8-positive indolent T-Cell lymphoproliferative disorder of the gastrointestinal tract: A case report and review of literature
Weng CY, Ye C, Fan YH, Lv B, Zhang CL, Li M
- 4985** Bone flare after initiation of novel hormonal therapy in patients with metastatic hormone-sensitive prostate cancer: A case report
Li KH, Du YC, Yang DY, Yu XY, Zhang XP, Li YX, Qiao L
- 4991** Postoperative infection of the skull base surgical site due to suppurative parotitis: A case report
Zhao Y, Zhao Y, Zhang LQ, Feng GD
- 4998** Blunt aortic injury-traumatic aortic isthmus pseudoaneurysm with right iliac artery dissection aneurysm: A case report
Fang XX, Wu XH, Chen XF
- 5005** Extensive complex thoracoabdominal aortic aneurysm salvaged by surgical graft providing landing zone for endovascular graft: A case report
Jang AY, Oh PC, Kang JM, Park CH, Kang WC
- 5012** Gastric heterotopia of colon found cancer workup in liver abscess: A case report
Park JG, Suh JI, Kim YU
- 5018** Clinical manifestations and gene analysis of Hutchinson-Gilford progeria syndrome: A case report
Zhang SL, Lin SZ, Zhou YQ, Wang WQ, Li JY, Wang C, Pang QM
- 5025** Neurocutaneous melanosis with an intracranial cystic-solid meningeal melanoma in an adult: A case report and review of literature
Liu BC, Wang YB, Liu Z, Jiao Y, Zhang XF
- 5036** Metastasis of liver cancer to the thyroid after surgery: A case report
Zhong HC, Sun ZW, Cao GH, Zhao W, Ma K, Zhang BY, Feng YJ

- 5042** Spontaneous liver rupture following SARS-CoV-2 infection in late pregnancy: A case report
Ambrož R, Stašek M, Molnár J, Špička P, Klos D, Hambálek J, Skanderová D
- 5051** Carotid blowout syndrome caused by chronic infection: A case report
Xie TH, Zhao WJ, Li XL, Hou Y, Wang X, Zhang J, An XH, Liu LT
- 5057** Is repeat wide excision plus radiotherapy of localized rectal melanoma another choice before abdominoperineal resection? A case report
Chiu HT, Pu TW, Yen H, Liu T, Wen CC
- 5064** Metaplastic breast cancer with chondrosarcomatous differentiation combined with concurrent bilateral breast cancer: A case report
Yang SY, Li Y, Nie JY, Yang ST, Yang XJ, Wang MH, Zhang J
- 5072** Rare solitary splenic metastasis from a thymic carcinoma detected on fluorodeoxyglucose-positron emission tomography: A case report
Tsai YH, Lin KH, Huang TW
- 5077** Type A aortic dissection following heart transplantation: A case report
Zeng Z, Yang LJ, Zhang C, Xu F
- 5082** Catheter-related infections caused by *Mycobacterium abscessus* in a patient with motor neurone disease: A case report
Pan SF, Zhang YY, Wang XZ, Sun JJ, Song SL, Tang YR, Wang JL
- 5088** Clear aligner treatment for a four-year-old patient with anterior cross-bite and facial asymmetry: A case report
Zou YR, Gan ZQ, Zhao LX
- 5097** Knot impingement after arthroscopic rotator cuff repair mimicking infection: A case report
Kim DH, Jeon JH, Choi BC, Cho CH
- 5103** Solitary primary pulmonary synovial sarcoma: A case report
He WW, Huang ZX, Wang WJ, Li YL, Xia QY, Qiu YB, Shi Y, Sun HM
- 5111** Anesthetic management for intraoperative acute pulmonary embolism during inferior vena cava tumor thrombus surgery: A case report
Hsu PY, Wu EB
- 5119** Delayed diagnosis of arytenoid cartilage dislocation after tracheal intubation in the intensive care unit: A case report
Yan WQ, Li C, Chen Z

ABOUT COVER

Editorial Board Member of *World Journal of Clinical Cases*, Jing Yang, MD, Associate Professor, Department of the First General Surgery, Gansu Provincial Hospital, Lanzhou 730000, Gansu Province, China. 21634604@qq.com

AIMS AND SCOPE

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

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

INDEXING/ABSTRACTING

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

RESPONSIBLE EDITORS FOR THIS ISSUE

Production Editor: Ying-Yi Yuan; Production Department Director: Xiang Li; Editorial Office Director: Jin-Lei Wang.

NAME OF JOURNAL

World Journal of Clinical Cases

ISSN

ISSN 2307-8960 (online)

LAUNCH DATE

April 16, 2013

FREQUENCY

Thrice Monthly

EDITORS-IN-CHIEF

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

EDITORIAL BOARD MEMBERS

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

PUBLICATION DATE

May 26, 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>

Type A aortic dissection following heart transplantation: A case report

Zhu Zeng, Lin-Jie Yang, Chao Zhang, Fen Xu

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

P-Reviewer: Cimen SG, Turkey;
Jian X, China

Received: December 10, 2021

Peer-review started: December 10, 2021

First decision: January 26, 2022

Revised: January 30, 2022

Accepted: March 26, 2022

Article in press: March 26, 2022

Published online: May 26, 2022



Zhu Zeng, Lin-Jie Yang, Chao Zhang, Fen Xu, Department of Cardiovascular Surgery, Union Hospital, Tongji Medical College, Huazhong University of Science and Technology, Wuhan 430022, Hubei Province, China

Corresponding author: Lin-Jie Yang, BSc, Nurse, Chief Nurse, Department of Cardiovascular Surgery, Union Hospital, Tongji Medical College, Huazhong University of Science and Technology, No. 1277 Jiefang Avenue, Wuhan 430022, Hubei Province, China.

358520754@qq.com

Abstract

BACKGROUND

Cardiac transplantation is considered the standard treatment for refractory end-stage heart failure. Worldwide, 5074 heart transplantations were performed in 2015. About 100 heart transplants are performed at the authors' center each year. The usual complications of heart transplantation include graft rejection, infection, and graft dysfunction. Aortic dissection after heart transplantation is very rare and is a serious complication that requires a hybrid procedure.

CASE SUMMARY

A 58-year-old female patient was admitted to Union Hospital Affiliated to Tongji Medical College of Huazhong University of Science and Technology in July 2020 because of unprovoked low back pain without precipitating causes. Magnetic resonance imaging and computed tomography angiography showed type A aortic dissection with an aberrant right subclavian artery. After admission, urapidil was used to control blood pressure. Ten days later, the patient underwent ascending aortic and aortic arch replacement, subclavian artery reconstruction, and endovascular repair of abdominal and thoracic aortic aneurysms. A cardiopulmonary bypass was established through the right femoral artery and femoral vein. The aberrant right subclavian artery, innominate artery, left common carotid artery, and left subclavian artery were blocked, and the left and right common carotid arteries were cannulated for bilateral cerebral perfusion.

CONCLUSION

The right axillary artery could not be selected for cardiopulmonary bypass intubation because of aberrant right subclavian artery.

Key Words: Type A aortic dissection; Heart transplantation; Aberrant right subclavian artery; Cardiopulmonary bypass; Case report

Core Tip: There is a risk of hypertension after heart transplantation. Hypertension is a risk factor for aortic dissection that needs surgery. Hybrid procedure shortened the operation time and reduced complications. In this case, the patient had an aberrant right subclavian artery, and unilateral antegrade cerebral perfusion through the right axillary artery cannot be performed.

Citation: Zeng Z, Yang LJ, Zhang C, Xu F. Type A aortic dissection following heart transplantation: A case report. *World J Clin Cases* 2022; 10(15): 5077-5081

URL: <https://www.wjgnet.com/2307-8960/full/v10/i15/5077.htm>

DOI: <https://dx.doi.org/10.12998/wjcc.v10.i15.5077>

INTRODUCTION

Heart transplant recipients are at risk for post-transplantation complications such as rejection, infection, and graft dysfunction[1]. Post-transplantation aortic dissection is rare. The course of the disease and its surgical management are reported here.

CASE PRESENTATION

Chief complaints

A 58-year-old female patient was admitted to our center because of low back pain without precipitating causes.

History of present illness

Magnetic resonance imaging (MRI) showed a type A aortic dissection involving the aortic arch and extending to the ascending aorta up to the end of the left common iliac artery with an anomalous right subclavian artery (ARSA) (Figure 1).

History of past illness

The patient underwent orthotopic heart transplantation (Bicaval technique) 28 mo ago for dilated cardiomyopathy with a left ventricular ejection fraction of 23%. Her immunosuppressive protocol including tacrolimus (0.5 mg, qod), mycophenolate mofetil (0.5 g, q12h), and prednisone (20 mg, bid). The donor was a 24-year-old man with no reported medical history.

Personal and family history

The patient also had hypertension and diabetes mellitus.

Physical examination

Blood pressure on admission was 147/104 mmHg, and body mass index (BMI) was 30.1 kg/m².

Laboratory examinations

The value of D-dimer was 0.84 mg/L, and G and GM tests were negative.

Imaging examinations

On September 3, 2020, MRI showed a type A aortic dissection involving the aortic arch and extending to the ascending aorta up to the end of the left common iliac artery with an ARSA (Figure 1). The echocardiogram showed mild aortic valve insufficiency. The patient was diagnosed with type A aortic dissection.

FINAL DIAGNOSIS

The patient was diagnosed with type A aortic dissection after heart transplantation.



DOI: 10.12998/wjcc.v10.i15.5077 Copyright ©The Author(s) 2022.

Figure 1 Magnetic resonance image. Magnetic resonance imaging showed type A aortic dissection involving the aortic arch and extending to the ascending aorta up to the end of the left common iliac artery.

TREATMENT

The patient underwent a hybrid procedure which included ascending aortic and aortic arch replacement, subclavian artery reconstruction, and endovascular repair of abdominal and thoracic aortic aneurysms. A cardiopulmonary bypass was established through the right femoral artery and femoral vein when the core body temperature was lowered to 30–32 °C. The aberrant right subclavian artery, innominate artery, left common carotid artery, and left subclavian artery were blocked, and the left and right common carotid arteries were cannulated for bilateral cerebral perfusion. The distal port of the No. 24 four-branched artificial vessel was anastomosed with the proximal covered stent of the descending aorta. Cardiopulmonary bypass was resumed, and the body temperature was gradually turned to normal. The proximal port of the four-branched artificial vessel was anastomosed with the proximal autogenous aortic vessels padded with bovine pericardium. The heart restarted spontaneously. The four branches of the aortic arch were reconstructed one by one. A 30 mm × 200 mm aortic-covered stent was implanted through a femoral artery incision (Figure 2).

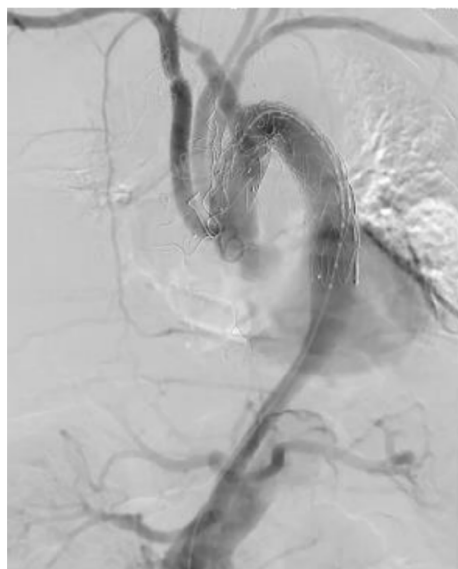
The procedure lasted 510 min, the cardiopulmonary bypass lasted 133 min, and the ascending aorta was blocked for 10 min. The duration of ventilator assistance was 64.5 h after surgery and the stay time in intensive care units was 8 d for a lung infection and blood pressure control.

OUTCOME AND FOLLOW-UP

On the third day after surgery, the patient was diagnosed with pneumonia and was treated with sulbactam sodium/cefoperazone sodium. During the postoperative period, esmolol hydrochloride and urapidil hydrochloride were used to control blood pressure. Ulinastatin was used to reduce myocardial reperfusion injury. Sulbactam sodium/cefoperazone sodium was used to prevent and control infection. Omeprazole was used to inhibit gastric acid secretion. The patient was discharged home 25 d after surgery without low back pain. One month after discharge, the patient complained of cough and expectoration. Erythrocyte sedimentation rate was 34 mm/h, and C-reactive protein was 35.9 mg/L. The above laboratory tests were normal after anti-infection treatment for 7 d. The patient had no symptoms, cough, or sputum.

DISCUSSION

Aortic dissection after heart transplantation is very rare and is a serious complication[2]. In this case, the hybrid procedure shortened the operation time and reduced complications. Because the patient had an ARSA, the right axillary artery could not be selected for cardiopulmonary bypass intubation.



DOI: 10.12998/wjcc.v10.i15.5077 Copyright ©The Author(s) 2022.

Figure 2 Angiography image. The branches of the aortic arch, celiac trunk, superior mesenteric artery, and left and right renal artery were well developed.

Arterial hypertension is one of the most important risk factors for aortic dissection in general and occurs in about 71% of heart transplant patients in the first year after transplantation[3]. Tacrolimus, corticosteroids[4], and post-transplant weight gain are also related to arterial hypertension[5].

The patient had an ARSA, which is encountered in approximately 1% of the population. In this case, the dissection originated from an entry tear in the transverse arch. Of crucial importance, unilateral antegrade cerebral perfusion through the right axillary artery could not be performed.

CONCLUSION

Type A aortic dissection following heart transplantation is a rare complication that requires emergency surgery. The patient benefited from a hybrid procedure, which shortened the operation time and reduced complications.

FOOTNOTES

Author contributions: Zeng Z performed the conceptualization, data curation, project administration, resources, supervision, and visualization, and wrote the original draft; Yang LJ performed the data curation, formal analysis, software, validation, and visualization, and wrote and edited the manuscript; Xu F obtained the funding; Zhang C performed the investigation and methodology.

Supported by Natural Science Foundation of Hubei Province in 2016, No. 2016CFB644.

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: China

ORCID number: Zhu Zeng 0000-0002-7164-4431; Lin-Jie Yang 0000-0002-3231-7489; Chao Zhang 0000-0003-2028-6416;

Fen Xu 0000-0003-2990-5455.

S-Editor: Fan JR

L-Editor: Wang TQ

P-Editor: Fan JR

REFERENCES

- 1 **Writing committee member**, Yancy CW, Jessup M, Bozkurt B, Butler J, Casey DE Jr, Drazner MH, Fonarow GC, Geraci SA, Horwich T, Januzzi JL, Johnson MR, Kasper EK, Levy WC, Masoudi FA, McBride PE, McMurray JJ, Mitchell JE, Peterson PN, Riegel B, Sam F, Stevenson LW, Tang WH, Tsai EJ, Wilkoff BL; American College of Cardiology Foundation/American Heart Association Task Force on Practice Guidelines. 2013 ACCF/AHA guideline for the management of heart failure: a report of the American College of Cardiology Foundation/American Heart Association Task Force on practice guidelines. *Circulation* 2013; **128**: e240-e327 [PMID: [23741058](#) DOI: [10.1161/CIR.0b013e31829e8776](#)]
- 2 **Hage A**, Hage F, Toeg H, Davies R, Boodhwani M. Aortic dissection following heart transplantation. *J Card Surg* 2017; **32**: 156-158 [PMID: [28139011](#) DOI: [10.1111/jocs.13096](#)]
- 3 **Lund LH**, Khush KK, Cherikh WS, Goldfarb S, Kucheryavaya AY, Levvey BJ, Meiser B, Rossano JW, Chambers DC, Yusef RD, Stehlik J; International Society for Heart and Lung Transplantation. The Registry of the International Society for Heart and Lung Transplantation: Thirty-fourth Adult Heart Transplantation Report-2017; Focus Theme: Allograft ischemic time. *J Heart Lung Transplant* 2017; **36**: 1037-1046 [PMID: [28779893](#) DOI: [10.1016/j.healun.2017.07.019](#)]
- 4 **Hořková L**, Málek I, Kopkan L, Kautzner J. Pathophysiological mechanisms of calcineurin inhibitor-induced nephrotoxicity and arterial hypertension. *Physiol Res* 2017; **66**: 167-180 [PMID: [27982677](#) DOI: [10.33549/physiolres.933332](#)]
- 5 **Bennett AL**, Ventura HO. Hypertension in Patients with Cardiac Transplantation. *Med Clin North Am* 2017; **101**: 53-64 [PMID: [27884235](#) DOI: [10.1016/j.mcna.2016.08.011](#)]



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>

