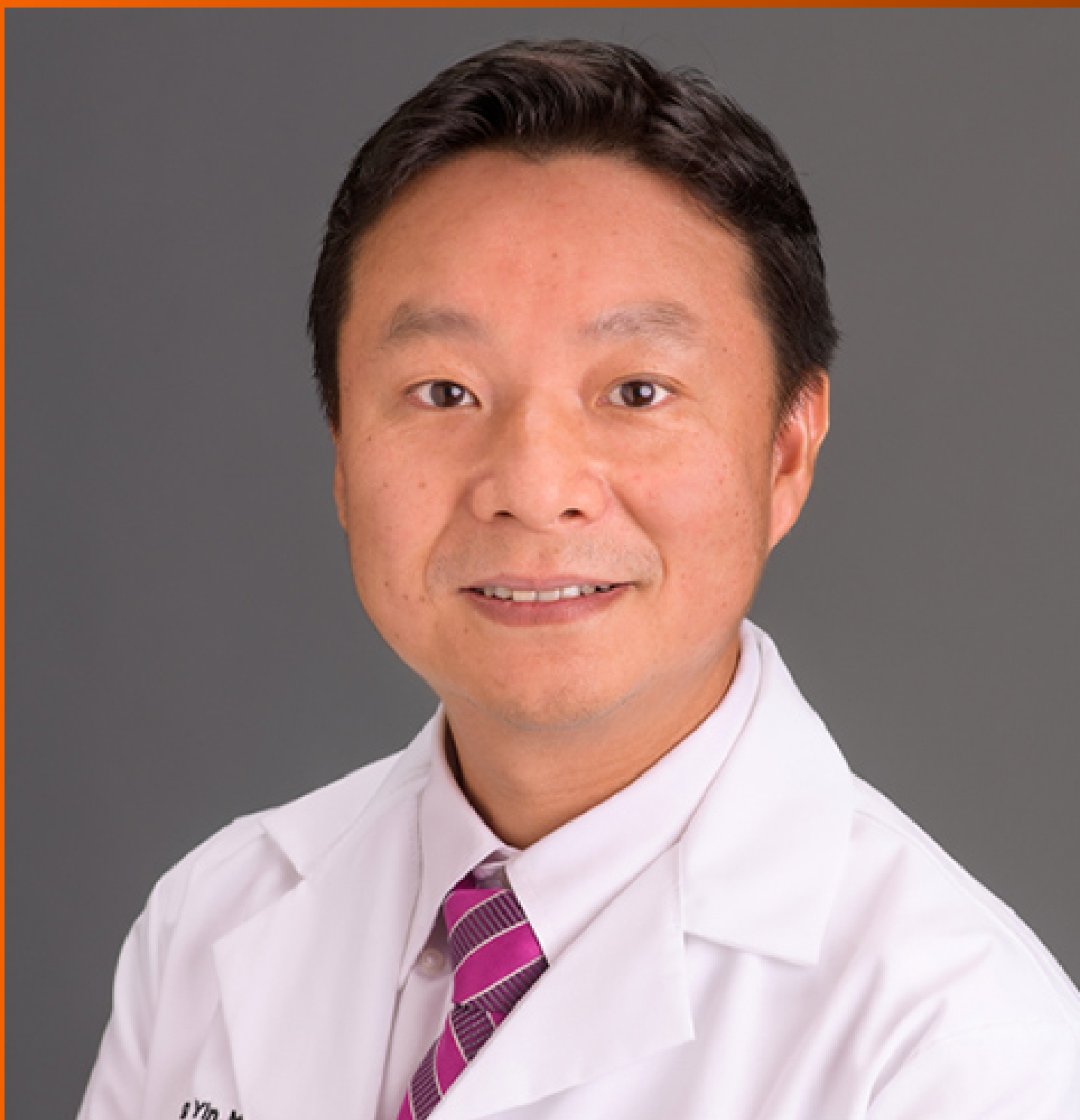


# World Journal of *Clinical Cases*

*World J Clin Cases* 2022 March 6; 10(7): 2053-2361



**FIELD OF VISION**

- 2053 Personalized treatment - which interaction ingredients should be focused to capture the unconscious  
*Steinmair D, Löffler-Stastka H*

**MINIREVIEWS**

- 2063 Patterns of liver profile disturbance in patients with COVID-19  
*Shousha HI, Ramadan A, Lithy R, El-Kassas M*

**ORIGINAL ARTICLE****Clinical and Translational Research**

- 2072 Prognostic and biological role of the N-Myc downstream-regulated gene family in hepatocellular carcinoma  
*Yin X, Yu H, He XK, Yan SX*

**Case Control Study**

- 2087 Usefulness of the acromioclavicular joint cross-sectional area as a diagnostic image parameter of acromioclavicular osteoarthritis  
*Joo Y, Moon JY, Han JY, Bang YS, Kang KN, Lim YS, Choi YS, Kim YU*
- 2095 Correlation between betatrophin/angiogenin-likeprotein3/lipoprotein lipase pathway and severity of coronary artery disease in Kazakh patients with coronary heart disease  
*Qin L, Rehemuding R, Ainiwaer A, Ma X*

**Retrospective Study**

- 2106 Postoperative adverse cardiac events in acute myocardial infarction with high thrombus load and best time for stent implantation  
*Zhuo MF, Zhang KL, Shen XB, Lin WC, Hu B, Cai HP, Huang G*
- 2115 Develop a nomogram to predict overall survival of patients with borderline ovarian tumors  
*Gong XQ, Zhang Y*

**Clinical Trials Study**

- 2127 Diagnostic performance of Neutrophil CD64 index, procalcitonin, and C-reactive protein for early sepsis in hematological patients  
*Shang YX, Zheng Z, Wang M, Guo HX, Chen YJ, Wu Y, Li X, Li Q, Cui JY, Ren XX, Wang LR*
- 2138 Previously unexplored etiology for femoral head necrosis: Metagenomics detects no pathogens in necrotic femoral head tissue  
*Liu C, Li W, Zhang C, Pang F, Wang DW*

**Observational Study**

- 2147** Association of types of diabetes and insulin dependency on birth outcomes  
*Xaverius PK, Howard SW, Kiel D, Thurman JE, Wankum E, Carter C, Fang C, Carriere R*
- 2159** Pathological pattern of endometrial abnormalities in postmenopausal women with bleeding or thickened endometrium  
*Xue H, Shen WJ, Zhang Y*
- 2166** *In vitro* maturation of human oocytes maintaining good development potential for rescue intracytoplasmic sperm injection with fresh sperm  
*Dong YQ, Chen CQ, Huang YQ, Liu D, Zhang XQ, Liu FH*
- 2174** Ultrasound-guided paravertebral nerve block anesthesia on the stress response and hemodynamics among lung cancer patients  
*Zhen SQ, Jin M, Chen YX, Li JH, Wang H, Chen HX*

**META-ANALYSIS**

- 2184** Prognostic value of YKL-40 in colorectal carcinoma patients: A meta-analysis  
*Wang J, Qi S, Zhu YB, Ding L*
- 2194** Prognostic value of neutrophil/lymphocyte, platelet/lymphocyte, lymphocyte/monocyte ratios and Glasgow prognostic score in osteosarcoma: A meta-analysis  
*Peng LP, Li J, Li XF*

**CASE REPORT**

- 2206** Endovascular stent-graft treatment for aortoesophageal fistula induced by an esophageal fishbone: Two cases report  
*Gong H, Wei W, Huang Z, Hu Y, Liu XL, Hu Z*
- 2216** Quetiapine-related acute lung injury: A case report  
*Huang YX, He GX, Zhang WJ, Li BW, Weng HX, Luo WC*
- 2222** Primary hepatic neuroendocrine neoplasm diagnosed by somatostatin receptor scintigraphy: A case report  
*Akabane M, Kobayashi Y, Kinowaki K, Okubo S, Shindoh J, Hashimoto M*
- 2229** Multidisciplinary non-surgical treatment of advanced periodontitis: A case report  
*Li LJ, Yan X, Yu Q, Yan FH, Tan BC*
- 2247** Flip-over of blood vessel intima caused by vascular closure device: A case report  
*Sun LX, Yang XS, Zhang DW, Zhao B, Li LL, Zhang Q, Hao QZ*
- 2253** Huge gastric plexiform fibromyxoma presenting as pyemia by rupture of tumor: A case report  
*Zhang R, Xia LG, Huang KB, Chen ND*
- 2261** Intestinal intussusception caused by intestinal duplication and ectopic pancreas: A case report and review of literature  
*Wang TL, Gong XS, Wang J, Long CY*

- 2268** Mixed neuroendocrine-non-neuroendocrine neoplasm of the ampulla: Four case reports  
*Wang Y, Zhang Z, Wang C, Xi SH, Wang XM*
- 2275** Y-shaped shunt for the treatment of Dandy-Walker malformation combined with giant arachnoid cysts: A case report  
*Dong ZQ, Jia YF, Gao ZS, Li Q, Niu L, Yang Q, Pan YW, Li Q*
- 2281** Posterior reversible encephalopathy syndrome in a patient with metastatic breast cancer: A case report  
*Song CH, Lee SJ, Jeon HR*
- 2286** Multiple skin abscesses associated with bacteremia caused by *Burkholderia gladioli*: A case report  
*Wang YT, Li XW, Xu PY, Yang C, Xu JC*
- 2294** Giant infected hepatic cyst causing exclusion pancreatitis: A case report  
*Kenzaka T, Sato Y, Nishisaki H*
- 2301** Cutaneous leishmaniasis presenting with painless ulcer on the right forearm: A case report  
*Zhuang L, Su J, Tu P*
- 2307** Gastrointestinal amyloidosis in a patient with smoldering multiple myeloma: A case report  
*Liu AL, Ding XL, Liu H, Zhao WJ, Jing X, Zhou X, Mao T, Tian ZB, Wu J*
- 2315** Breast and dorsal spine relapse of granulocytic sarcoma after allogeneic stem cell transplantation for acute myelomonocytic leukemia: A case report  
*Li Y, Xie YD, He SJ, Hu JM, Li ZS, Qu SH*
- 2322** Synchronous but separate neuroendocrine tumor and high-grade dysplasia/adenoma of the gall bladder: A case report  
*Hsiao TH, Wu CC, Tseng HH, Chen JH*
- 2330** Novel mutations of the Alström syndrome 1 gene in an infant with dilated cardiomyopathy: A case report  
*Jiang P, Xiao L, Guo Y, Hu R, Zhang BY, He Y*
- 2336** Acute esophageal obstruction after ingestion of psyllium seed husk powder: A case report  
*Shin S, Kim JH, Mun YH, Chung HS*
- 2341** Spontaneous dissection of proximal left main coronary artery in a healthy adolescent presenting with syncope: A case report  
*Liu SF, Zhao YN, Jia CW, Ma TY, Cai SD, Gao F*
- 2351** Relationship between treatment types and blood-brain barrier disruption in patients with acute ischemic stroke: Two case reports  
*Seo Y, Kim J, Chang MC, Huh H, Lee EH*
- 2357** Ultrasound-guided rectus sheath block for anterior cutaneous nerve entrapment syndrome after laparoscopic surgery: A case report  
*Sawada R, Watanabe K, Tokumine J, Lefor AK, Ando T, Yorozu T*

**ABOUT COVER**

Editorial Board Member of *World Journal of Clinical Cases*, Feng Yin, MD, PhD, Assistant Professor, Department of Pathology and Anatomic Sciences, University of Missouri, Columbia, MO 65212, United States.  
fengyin@health.missouri.edu

**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: Lin-YuTong Wang; Production Department Director: Xiang Li; Editorial Office Director: Jin-Lai 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**

March 6, 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>



## Quetiapine-related acute lung injury: A case report

Yi-Xia Huang, Guo-Xin He, Wen-Jing Zhang, Bo-Wu Li, Hai-Xu Weng, Wen-Chao Luo

**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  
Grade C (Good): 0  
Grade D (Fair): D  
Grade E (Poor): 0

**P-Reviewer:** Hassaan NA, Nakhleh A

**Received:** March 24, 2021

**Peer-review started:** March 24, 2021

**First decision:** October 16, 2021

**Revised:** October 27, 2021

**Accepted:** January 22, 2022

**Article in press:** January 22, 2022

**Published online:** March 6, 2022



Yi-Xia Huang, Guo-Xin He, Wen-Jing Zhang, Bo-Wu Li, Hai-Xu Weng, Wen-Chao Luo, Intensive Care Unit, The Third Affiliated Hospital, Wenzhou Medical University, Ruian 330381, Zhejiang Province, China

**Corresponding author:** Yi-Xia Huang, BMed, Doctor, Intensive Care Unit, The Third Affiliated Hospital, Wenzhou Medical University, No. 108 Wansong Road, Ruian 330381, Zhejiang Province, China. [378206482@qq.com](mailto:378206482@qq.com)

### Abstract

#### BACKGROUND

Quetiapine, known as a non-classical antipsychotic drug, is frequently used for the treatment of mental diseases, such as schizophrenia, bipolar disorder, and major depressive disorder. Acute lung injury, a rarely reported side effect of quetiapine, is described in this case report.

#### CASE SUMMARY

Due to terminal delirium, a 66-year-old man took a large dose of quetiapine and then developed severe pulmonary disease. His symptoms were not resolved after routine treatment, such as antibiotics, diuretic, and supportive therapies. Quetiapine-related acute lung injury was therefore suspected and hormonal therapy was initiated. Subsequently, his symptoms were alleviated and the radiological results improved dramatically.

#### CONCLUSION

Our findings in the present report highlight a potential adverse effect of quetiapine, drug-related acute lung injury, which deserves awareness in clinical practice.

**Key Words:** Quetiapine; Acute lung injury; Side effect; Case report

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

**Core Tip:** Quetiapine is a non-classic antipsychotic drug. Acute lung injury, a rarely reported side effect of quetiapine, is described in this case report. Common etiologies were ruled out when the patient's symptoms were not resolved after routine treatment. Finally, quetiapine-related acute lung injury was suspected and hormonal therapy was initiated. The patient's symptoms were alleviated and the radiological results improved. The case report highlights this potential adverse effect of quetiapine, which deserves more awareness in clinical practice.

**Citation:** Huang YX, He GX, Zhang WJ, Li BW, Weng HX, Luo WC. Quetiapine-related acute lung injury: A case report. *World J Clin Cases* 2022; 10(7): 2216-2221

**URL:** <https://www.wjgnet.com/2307-8960/full/v10/i7/2216.htm>

**DOI:** <https://dx.doi.org/10.12998/wjcc.v10.i7.2216>

## INTRODUCTION

Quetiapine is a commonly prescribed atypical antipsychotic drug used for the treatment of several mental diseases, such as schizophrenia, bipolar disorder, and major depressive disorder. It is also effective for patients with delirium, those with obsessive-compulsive disorder, *etc.* Due to its efficacy and few reported side effects, quetiapine is widely used in clinical practice[1].

The reported adverse effects of quetiapine are relatively rare and mild, such as extrapyramidal reaction, dizziness, drowsiness, abnormal liver function, postural hypotension, and tachycardia[2]. Quetiapine overdose is rarely reported and limited information is available regarding overuse cases. Therefore, a case of acute lung injury caused by a large dose of quetiapine is presented and awareness of this adverse reaction may improve patient outcomes.

## CASE PRESENTATION

### Chief complaints

On April 5, 2016, a 66-year-old man was admitted to our hospital for delirium lasting for 6 h.

### History of present illness

The patient's family found him to be delirious and a medicine bottle used for quetiapine storage [20 tablets (200 mg)] was empty. The patient was suspected of having taken a large dose of quetiapine. Gastric lavage was performed and he was admitted to the intensive care unit (ICU) for further management.

### History of past illness

The patient had a history of mental illness, but the details were unclear. He had a medical history of quetiapine use during the past 6 mo.

### Personal and family history

No abnormalities were found in the patient's personal and family history.

### Physical examination

The patient's vital signs were as follows: Heart rate, 118 beats/min; respiratory rate, 13 breaths/min; systolic/diastolic blood pressure, 146/69 mmHg; and temperature, 36.6 °C. The Glasgow Coma Score was calculated and estimated to be 5. Moist rale was heard on auscultation of the lungs. Both pupils were round and equal (3.5 mm) and the heart rhythm was normal.

### Laboratory examinations

Blood analysis revealed leukocytosis with a white blood cell count of  $16.6 \times 10^9/L$ , predominantly neutrophils (94.9%), and a normal platelet count. Prothrombin and partial thromboplastin times were prolonged, and D-dimers were slightly increased at 1.63 µg/mL. Serum C-reactive protein was elevated at 80.0 mg/L (normal range, < 8 mg/L) and procalcitonin was normal. The blood biochemistry results, as well as urine analysis, were normal.

### Imaging examinations

Abnormal radiological features such as lacunar cerebral infarction in the bilateral thalamus and left basal ganglia, consolidation in both lower lobes, and nodules in the dorsal segment of the left lower



lung were suggested by computed tomography (CT) (Figure 1A).

## FURTHER EXAMINATION, DIAGNOSIS, AND TREATMENT

Due to the suspicion of quetiapine intoxication, therapies such as oxygen inhalation, hemoperfusion (three times), hemofiltration, reduced glutathione, and naloxone were administered. Unfortunately, the patient's blood oxygen saturation gradually decreased, reaching 83%-86% on the 3<sup>rd</sup> day even with an oxygen flow rate of 10 L/min. Emergency endotracheal intubation and mechanical ventilation were then used [ventilator parameters: Oxygen concentration fraction (FiO<sub>2</sub>), 80%; pressure support, 20 cm H<sub>2</sub>O; positive end-expiratory pressure, 10 cm H<sub>2</sub>O]. Similarly, blood pressure was measured and decreased to 90/52 mmHg during the ICU stay. After norepinephrine administration [0.1-0.3 g/(kg · min)] for 30 h, blood pressure was restored to 115-145/56-68 mmHg. The cardiac ultrasound examination was normal and B-type natriuretic peptide (BNP) was 184.6 ng/L. Chest radiography revealed more patchy shadows with increased density and blurred borders in the lungs. On the 4<sup>th</sup> day, the patient regained consciousness. For blood oxygen saturation, FiO<sub>2</sub> was kept at 70% for ventilation. Additionally, antibiotic and diuretic treatments resulted in no improvements in the oxygenation index. On the 8<sup>th</sup> day, C-reactive protein had decreased to 47.4 mg/L, but chest CT (Figure 1B) was performed again and showed diffuse exudation and ground-glass shadows in the lungs. During the treatment period, the patient underwent sputum (*n* = 5), urine (*n* = 1), and blood (*n* = 1) cultures, with no evidence of infection.

## FINAL DIAGNOSIS

Based on these observations, common diagnoses (such as pulmonary infection, congestive heart failure, and pulmonary embolism) were ruled out. Finally, the man was diagnosed with quetiapine-related acute lung injury.

## TREATMENT

On April 14, methylprednisolone was administrated as follows: 80 mg, intravenous drip every 8 h for 8 d; 80 mg, intra-venous infusion every 12 h for 7 d; 40 mg intravenous infusion every 12 h for 7 d; 40 mg intravenous drip every 8 h for 3 d; and 20 mg intravenous drip every 8 h. In addition, prone ventilation was performed.

## OUTCOME AND FOLLOW-UP

FiO<sub>2</sub> was kept stable at 60%-80% for ventilation between April 14 and April 22. On April 23, FiO<sub>2</sub> was reduced to 55% and was gradually decreased due to the improvement of the oxygenation index. The patient's radiological results improved dramatically (Figure 1C). Finally, on May 7, the endotracheal tube was removed and the patient required no further mechanical ventilatory support. The patient was discharged on June 3 after his condition improved. The patient's condition and interventions during hospitalization are shown in Table 1.

## DISCUSSION

Quetiapine is a dibenzothiazepine derivative that shows affinity for a variety of neurotransmitter receptors including dopamine and 5-hydroxytryptamine receptors. In China, several studies have demonstrated that quetiapine is effective for many mental symptoms, such as schizophrenia, affective disorders, and mental disorders associated with organic brain diseases such as Alzheimer's disease. Its efficacy in the control of delirium and obsessive-compulsive disorder was also observed and few side effects have been reported with its use. Therefore, quetiapine is widely used in developing countries[1].

Adverse reactions to quetiapine are infrequent in clinical practice. However, adverse reactions have been widely evaluated and the relevant information was often obtained from clinical trials involving patients or volunteers, or from datasets obtained from drug administration. As reported in the drug product information, the most common adverse reaction to quetiapine is nervous system damage, which usually presents with extrapyramidal reactions, dizziness, and drowsiness. Other adverse reactions include gastrointestinal disorders, hepatobiliary disorders, cardiac disorders, and blood and lymphatic system disorders[2,3]. In a systematic review, the data suggested that common adverse



**Table 1 Changes in the patient's condition and treatment measures in 2016**

Timeline	April 5	April 6	April 7	April 8	April 14	April 23	May 7
Condition	Delirium	Blood pressure <sup>1</sup>	Blood oxygen saturation <sup>1</sup>	Regained consciousness, blood oxygen saturation (unchanged)	Blood oxygen saturation (unchanged)	Blood oxygen saturation <sup>2</sup>	Blood oxygen saturation <sup>2</sup>
Intervention	Admission and hemoperfusion	Norepinephrine	Endotracheal intubation and mechanical ventilation	Antibiotic and diuretic treatments	Methylprednisolone	Methylprednisolone decrement	Intubation (removed)

<sup>1</sup>Down.<sup>2</sup>Up.

**Figure 1 Chest computed tomography images of the patient at different times.** A: Chest computed tomography (CT) image on April 5, 2016 showing consolidation in both lower lobes and nodules in the dorsal segment of the left lower lung; B: Chest CT image on April 13, 2016 showing diffuse exudation and ground-glass shadows in the lungs; C: Chest CT image on May 5, 2016 showing that the exudation and consolidation of both lungs decreased significantly.

reactions to quetiapine included somnolence (25%-39%), dizziness (15%-27%), headache (10%-23%), postural hypotension (6%-18%), and weight gain (11%-30%)[4]. Additionally, quetiapine treatment can increase the risk of pneumonia among patients with schizophrenia[5], which has been confirmed in a case of quetiapine-induced interstitial pneumonia[6].

Clinical presentations of drug-related lung injuries are usually nonspecific, such as clinical symptoms, radiological features, and pathological evidence. Hence, it is difficult to make a definite diagnosis. Recently, a consensus statement on drug-related lung injury was issued by the Japanese Respiratory Society and several criteria for the diagnosis of drug-related lung injuries were addressed as follows: A drug which can induce lung injury and the corresponding clinical presentation was used; other causes for the injury may exist; the clinical presentation could improve after drug discontinuation and worsen if the drug is used again[7]. Identification of lung injuries caused by the drug is generally indirect. A combination of the medical history, laboratory examination, and response to treatment should be considered for clinical diagnosis. This is because objective diagnostic criteria are lacking and the diagnosis continues to rely on the presence or absence of a response to the drug. Drug-related lung injury usually stops progressing after drug discontinuation. The patient's condition improves after hormone use, leading to recovery from the injury[8]. However, the radiological features of drug-related injury are similar to those of other diseases, such as interstitial pneumonitis, pulmonary fibrosis, hypersensitivity reaction, acute respiratory distress syndrome, and bronchiolitis obliterans organizing pneumonia. If the patient's medical history suggests a potential risk of drug-related injury, further efforts may be required[9].

As an adverse reaction, respiratory disorders are rarely reported in patients with quetiapine use and the corresponding rate among total adverse events was reported to be 2.8%[3]. To date, few cases of drug poisoning that eventually resulted in quetiapine overdose have been reported in China. In a recent study, a case series of 12 patients who ingested 500-12000 mg quetiapine at once were reviewed, and several clinical characteristics associated with quetiapine use were identified, such as somnolence, slow pupillary light reflex, tachycardia, lethargy, excited agitation, hypokalemia, coma, slurred speech, pupil dilation, elevated white blood cells, and electrocardiogram abnormality[10]. The mechanism by which quetiapine induces drug-related lung injury remains unclear and requires further investigation. One possible explanation is that quetiapine is mainly metabolized by CYP3A4, which is found in lung tissues[11]. Afterward, toxic metabolites are generated, such as 7-hydroxyquetiapine, which contribute to the pulmonary impairment[12,13].

In terms of drug-related lung injury treatment, the most important factor is stopping the drug use, which usually leads to the alleviation of symptoms in most patients. Glucocorticoid therapy is subsequently administered to patients who require further intervention. Most physicians recommend

the administration of glucocorticoid at 1 mg/kg for several months (based on clinical manifestations and procedures), followed by a reduction[14]; however, the appropriate dose of hormones for the treatment of drug-related lung injuries remains unclear due to a lack of evidence. At present, quetiapine is widely used in China. Although there are few cases of lung injuries caused by quetiapine and the mechanism is unclear, studies are warranted to confirm the existence of a dose correlation. However, clinicians should be vigilant during the diagnosis and treatment, and should be aware of the possibility of drug-related lung injuries caused by quetiapine.

## CONCLUSION

Quetiapine is an atypical antipsychotic drug commonly prescribed for the treatment of several mental diseases, but its side effects are concerning, even though they are not commonly seen in the clinic. In this case report, we describe a case of drug-related acute lung injury caused by high-dose quetiapine intoxication. Although there are few cases of lung injuries caused by quetiapine and the mechanism is unclear, clinicians should be vigilant during the diagnosis and treatment, and should be aware of the possibility of drug-related lung injuries caused by quetiapine.

## FOOTNOTES

**Author contributions:** Huang YX and He GX were responsible for the conception and design; Huang YX and Zhang WJ were responsible for manuscript writing and revision; Li BW, Weng HX, and Luo WC participated in the data analysis; and all authors read and approved the final manuscript.

**Informed consent statement:** Written informed consent was obtained from the patient for publication of this case report.

**Conflict-of-interest statement:** The authors report no conflicts of interest in this work.

**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:** Yi-Xia Huang 0000-0002-2250-7879; Guo-Xin He 0000-0002-7799-0714; Wen-Jing Zhang 0000-0002-1448-1074; Bo-Wu Li 0000-0003-3859-5938; Hai-Xu Weng 0000-0003-4182-7453; Wen-Chao Luo 0000-0002-9616-8793.

**S-Editor:** Wang JJ

**L-Editor:** Wang TQ

**P-Editor:** Wang JJ

## REFERENCES

- 1 Feng ZY, Wang ZG. The clinical application of quetiapine in China. *J Psychiat* 2010; **23**: 475-477 [DOI: 10.3969/j.issn.1009-7201.2010.06.031]
- 2 Shen JW, Ma Y, Mao YM. Analysis of 149 Adverse Drug Reaction Reports Induced by Quetiapine. *China Pharmacy* 2011; **2011**: 3031-3033 [DOI: 10.1097/fad.0b013e32834b1839]
- 3 Tapiainen V, Lavikainen P, Koponen M, Taipale H, Tanskanen A, Tiihonen J, Hartikainen S, Tolppanen AM. The Risk of Head Injuries Associated With Antipsychotic Use Among Persons With Alzheimer's disease. *J Am Geriatr Soc* 2020; **68**: 595-602 [PMID: 31912482 DOI: 10.1111/jgs.16275]
- 4 El-Saifi N, Moyle W, Jones C, Tuffaha H. Quetiapine safety in older adults: a systematic literature review. *J Clin Pharm Ther* 2016; **41**: 7-18 [PMID: 26813985 DOI: 10.1111/jcpt.12357]
- 5 Kuo CJ, Yang SY, Liao YT, Chen WJ, Lee WC, Shau WY, Chang YT, Tsai SY, Chen CC. Second-generation antipsychotic medications and risk of pneumonia in schizophrenia. *Schizophr Bull* 2013; **39**: 648-657 [PMID: 22282455 DOI: 10.1093/schbul/sbr202]
- 6 Kim SJ, Han SD, Lee JY, Chon GR. A case of drug-induced interstitial pneumonia potentially related to quetiapine (seroquel) therapy for behavioral and psychological symptoms. *Respir Care* 2014; **59**: e145-e148 [PMID: 24782551 DOI: 10.4187/respcare.02977]

- 7 **Kubo K**, Azuma A, Kanazawa M, Kameda H, Kusumoto M, Genma A, Saijo Y, Sakai F, Sugiyama Y, Tatsumi K, Dohi M, Tokuda H, Hashimoto S, Hattori N, Hanaoka M, Fukuda Y; Japanese Respiratory Society Committee for formulation of Consensus statement for the diagnosis and treatment of drug-induced lung injuries. Consensus statement for the diagnosis and treatment of drug-induced lung injuries. *Respir Investig* 2013; **51**: 260-277 [PMID: [24238235](#) DOI: [10.1016/j.resinv.2013.09.001](#)]
- 8 **Shi JH**, Yan XW, Xu WB, Liu HR, Zhu YY. Clinical diagnosis and treatment of drug-induced lung injury. *Chin J Tuberc Respir Dis* 2007; **30**: 161-166 [DOI: [10.3760/j.issn:1001-0939.2007.03.001](#)]
- 9 **Cleverley JR**, Screaton NJ, Hiorns MP, Flint JD, Müller NL. Drug-induced lung disease: high-resolution CT and histological findings. *Clin Radiol* 2002; **57**: 292-299 [PMID: [12014876](#) DOI: [10.1053/crad.2001.0792](#)]
- 10 **Bai R**. Clinical manifestations of quetiapine overdose. Chinese Nursing Association 2009 National Nursing Management Academic Exchange and special Lecture Conference Chinese Nursing Association 2009 National Nursing New Theory, New Method, New Technology Seminar. 2009 Nov 12; Leeds, China. Haikou: Chinese Nursing Association, 2009: 133-136
- 11 **Wijnen PA**, Bekers O, Drent M. Relationship between drug-induced interstitial lung diseases and cytochrome P450 polymorphisms. *Curr Opin Pulm Med* 2010; **16**: 496-502 [PMID: [20592596](#) DOI: [10.1097/MCP.0b013e32833c06f1](#)]
- 12 **DeVane CL**, Nemeroff CB. Clinical pharmacokinetics of quetiapine: an atypical antipsychotic. *Clin Pharmacokinet* 2001; **40**: 509-522 [PMID: [11510628](#) DOI: [10.2165/00003088-200140070-00003](#)]
- 13 **Grimm SW**, Stams KR, Bui K. In vitro prediction of potential metabolic drug interactions for seroquel. *Schizophr Res* 1997; **24**: 198-198 [DOI: [10.1016/S0920-9964\(97\)82567-4](#)]
- 14 **Cai BQ**, Li LY. Concord respiration of Peking Union Medical College Beijing. China: Peking Union Medical College Press, 2011



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](mailto:bpgoffice@wjgnet.com)

**Help Desk:** <https://www.f6publishing.com/helpdesk>

<https://www.wjgnet.com>

