

World Journal of *Clinical Cases*

World J Clin Cases 2022 July 6; 10(19): 6341-6758



MINIREVIEWS

- 6341** Review of clinical characteristics, immune responses and regulatory mechanisms of hepatitis E-associated liver failure
Chen C, Zhang SY, Chen L
- 6349** Current guidelines for *Helicobacter pylori* treatment in East Asia 2022: Differences among China, Japan, and South Korea
Cho JH, Jin SY
- 6360** Review of epidermal growth factor receptor-tyrosine kinase inhibitors administration to non-small-cell lung cancer patients undergoing hemodialysis
Lan CC, Hsieh PC, Huang CY, Yang MC, Su WL, Wu CW, Wu YK

ORIGINAL ARTICLE**Case Control Study**

- 6370** Pregnancy-related psychopathology: A comparison between pre-COVID-19 and COVID-19-related social restriction periods
Chieffo D, Avallone C, Serio A, Kotzalidis GD, Balocchi M, De Luca I, Hirsch D, Gonzalez del Castillo A, Lanzotti P, Marano G, Rinaldi L, Lanzone A, Mercuri E, Mazza M, Sani G
- 6385** Intestinal mucosal barrier in functional constipation: Dose it change?
Wang JK, Wei W, Zhao DY, Wang HF, Zhang YL, Lei JP, Yao SK

Retrospective Cohort Study

- 6399** Identification of risk factors for surgical site infection after type II and type III tibial pilon fracture surgery
Hu H, Zhang J, Xie XG, Dai YK, Huang X

Retrospective Study

- 6406** Total knee arthroplasty in Ranawat II valgus deformity with enlarged femoral valgus cut angle: A new technique to achieve balanced gap
Lv SJ, Wang XJ, Huang JF, Mao Q, He BJ, Tong PJ
- 6417** Preliminary evidence in treatment of eosinophilic gastroenteritis in children: A case series
Chen Y, Sun M
- 6428** Self-made wire loop snare successfully treats gastric persimmon stone under endoscopy
Xu W, Liu XB, Li SB, Deng WP, Tong Q
- 6437** Neoadjuvant transcatheter arterial chemoembolization and systemic chemotherapy for the treatment of undifferentiated embryonal sarcoma of the liver in children
He M, Cai JB, Lai C, Mao JQ, Xiong JN, Guan ZH, Li LJ, Shu Q, Ying MD, Wang JH

- 6446 Effect of cold snare polypectomy for small colorectal polyps

Meng QQ, Rao M, Gao PJ

- 6456 Field evaluation of COVID-19 rapid antigen test: Are rapid antigen tests less reliable among the elderly?

Tabain I, Cucevic D, Skreb N, Mrzljak A, Ferencak I, Hruskar Z, Mistic A, Kuzle J, Skoda AM, Jankovic H, Vilibic-Cavlek T

Observational Study

- 6464 Tracheobronchial intubation using flexible bronchoscopy in children with Pierre Robin sequence: Nursing considerations for complications

Ye YL, Zhang CF, Xu LZ, Fan HF, Peng JZ, Lu G, Hu XY

- 6472 Family relationship of nurses in COVID-19 pandemic: A qualitative study

Çelik MY, Kiliç M

META-ANALYSIS

- 6483 Diagnostic accuracy of ≥ 16 -slice spiral computed tomography for local staging of colon cancer: A systematic review and meta-analysis

Liu D, Sun LM, Liang JH, Song L, Liu XP

CASE REPORT

- 6496 Delayed-onset endophthalmitis associated with *Achromobacter* species developed in acute form several months after cataract surgery: Three case reports

Kim TH, Lee SJ, Nam KY

- 6501 Sustained dialysis with misplaced peritoneal dialysis catheter outside peritoneum: A case report

Shen QQ, Behera TR, Chen LL, Attia D, Han F

- 6507 Arteriovenous thrombotic events in a patient with advanced lung cancer following bevacizumab plus chemotherapy: A case report

Kong Y, Xu XC, Hong L

- 6514 Endoscopic ultrasound radiofrequency ablation of pancreatic insulinoma in elderly patients: Three case reports

Rossi G, Petrone MC, Capurso G, Partelli S, Falconi M, Arcidiacono PG

- 6520 Acute choroidal involvement in lupus nephritis: A case report and review of literature

Yao Y, Wang HX, Liu LW, Ding YL, Sheng JE, Deng XH, Liu B

- 6529 Triple A syndrome-related achalasia treated by per-oral endoscopic myotomy: Three case reports

Liu FC, Feng YL, Yang AM, Guo T

- 6536 Choroidal thickening with serous retinal detachment in BRAF/MEK inhibitor-induced uveitis: A case report

Kiraly P, Groznic AL, Valentinčić NV, Mekjavić PJ, Urbančić M, Ocvirk J, Mesti T

- 6543 Esophageal granular cell tumor: A case report

Chen YL, Zhou J, Yu HL

- 6548** Hem-o-lok clip migration to the common bile duct after laparoscopic common bile duct exploration: A case report
Liu DR, Wu JH, Shi JT, Zhu HB, Li C
- 6555** Chidamide and sintilimab combination in diffuse large B-cell lymphoma progressing after chimeric antigen receptor T therapy
Hao YY, Chen PP, Yuan XG, Zhao AQ, Liang Y, Liu H, Qian WB
- 6563** Relapsing polychondritis with isolated tracheobronchial involvement complicated with Sjogren's syndrome: A case report
Chen JY, Li XY, Zong C
- 6571** Acute methanol poisoning with bilateral diffuse cerebral hemorrhage: A case report
Li J, Feng ZJ, Liu L, Ma YJ
- 6580** Immunoabsorption therapy for Klinefelter syndrome with antiphospholipid syndrome in a patient: A case report
Song Y, Xiao YZ, Wang C, Du R
- 6587** Roxadustat for treatment of anemia in a cancer patient with end-stage renal disease: A case report
Zhou QQ, Li J, Liu B, Wang CL
- 6595** Imaging-based diagnosis for extraskeletal Ewing sarcoma in pediatrics: A case report
Chen ZH, Guo HQ, Chen JJ, Zhang Y, Zhao L
- 6602** Unusual course of congenital complete heart block in an adult: A case report
Su LN, Wu MY, Cui YX, Lee CY, Song JX, Chen H
- 6609** Penile metastasis from rectal carcinoma: A case report
Sun JJ, Zhang SY, Tian JJ, Jin BY
- 6617** Isolated cryptococcal osteomyelitis of the ulna in an immunocompetent patient: A case report
Ma JL, Liao L, Wan T, Yang FC
- 6626** Magnetic resonance imaging features of intrahepatic extramedullary hematopoiesis: Three case reports
Luo M, Chen JW, Xie CM
- 6636** Giant retroperitoneal liposarcoma treated with radical conservative surgery: A case report and review of literature
Lieto E, Cardella F, Erario S, Del Sorbo G, Reginelli A, Galizia G, Urraro F, Panarese I, Auricchio A
- 6647** Transplanted kidney loss during colorectal cancer chemotherapy: A case report
Pośpiech M, Kolonko A, Nieszporek T, Kozak S, Kozaczka A, Karkoszka H, Winder M, Chudek J
- 6656** Massive gastrointestinal bleeding after endoscopic rubber band ligation of internal hemorrhoids: A case report
Jiang YD, Liu Y, Wu JD, Li GP, Liu J, Hou XH, Song J

- 6664** Mills' syndrome is a unique entity of upper motor neuron disease with N-shaped progression: Three case reports
Zhang ZY, Ouyang ZY, Zhao GH, Fang JJ
- 6672** Entire process of electrocardiogram recording of Wellens syndrome: A case report
Tang N, Li YH, Kang L, Li R, Chu QM
- 6679** Retroperitoneal tumor finally diagnosed as a bronchogenic cyst: A case report and review of literature
Gong YY, Qian X, Liang B, Jiang MD, Liu J, Tao X, Luo J, Liu HJ, Feng YG
- 6688** Successful treatment of Morbihan disease with total glucosides of paeony: A case report
Zhou LF, Lu R
- 6695** Ant sting-induced whole-body pustules in an inebriated male: A case report
Chen SQ, Yang T, Lan LF, Chen XM, Huang DB, Zeng ZL, Ye XY, Wan CL, Li LN
- 6702** Plastic surgery for giant metastatic endometrioid adenocarcinoma in the abdominal wall: A case report and review of literature
Wang JY, Wang ZQ, Liang SC, Li GX, Shi JL, Wang JL
- 6710** Delayed-release oral mesalamine tablet mimicking a small jejunal gastrointestinal stromal tumor: A case report
Frosio F, Rausa E, Marra P, Boutron-Ruault MC, Lucianetti A
- 6716** Concurrent alcoholic cirrhosis and malignant peritoneal mesothelioma in a patient: A case report
Liu L, Zhu XY, Zong WJ, Chu CL, Zhu JY, Shen XJ
- 6722** Two smoking-related lesions in the same pulmonary lobe of squamous cell carcinoma and pulmonary Langerhans cell histiocytosis: A case report
Gencer A, Ozcibik G, Karakas FG, Sarbay I, Batur S, Borekci S, Turna A
- 6728** Proprotein convertase subtilisin/kexin type 9 inhibitor non responses in an adult with a history of coronary revascularization: A case report
Yang L, Xiao YY, Shao L, Ouyang CS, Hu Y, Li B, Lei LF, Wang H
- 6736** Multimodal imaging study of lipemia retinalis with diabetic retinopathy: A case report
Zhang SJ, Yan ZY, Yuan LF, Wang YH, Wang LF
- 6744** Primary squamous cell carcinoma of the liver: A case report
Kang LM, Yu DP, Zheng Y, Zhou YH
- 6750** Tumor-to-tumor metastasis of clear cell renal cell carcinoma to contralateral synchronous pheochromocytoma: A case report
Wen HY, Hou J, Zeng H, Zhou Q, Chen N

ABOUT COVER

Editorial Board Member of *World Journal of Clinical Cases*, Abdulqadir Jeprel Naswhan, MSc, RN, Director, Research Scientist, Senior Lecturer, Senior Researcher, Nursing for Education and Practice Development, Hamad Medical Corporation, Doha 576214, Qatar. anashwan@hamad.qa

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: *Xu Guo*; 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

July 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>

Concurrent alcoholic cirrhosis and malignant peritoneal mesothelioma in a patient: A case report

Liang Liu, Xiao-Yan Zhu, Wen-Jie Zong, Chuan-Lian Chu, Jing-Yu Zhu, Xing-Jie Shen

Specialty type: Gastroenterology and hepatology

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

P-Reviewer: Caiati C, Italy; Ferrarese A, Italy; Kumar R, India

Received: January 24, 2022

Peer-review started: January 24, 2022

First decision: March 23, 2022

Revised: March 28, 2022

Accepted: May 8, 2022

Article in press: May 8, 2022

Published online: July 6, 2022



Liang Liu, Xiao-Yan Zhu, Wen-Jie Zong, Chuan-Lian Chu, Jing-Yu Zhu, Xing-Jie Shen, Department of Gastroenterology, Central Hospital Affiliated to Shandong First Medical University, Jinan 250011, Shandong Province, China

Liang Liu, Xiao-Yan Zhu, Wen-Jie Zong, Chuan-Lian Chu, Jing-Yu Zhu, Xing-Jie Shen, Department of Gastroenterology, Jinan Clinical Research Center for Digestive Diseases, Jinan 250011, Shandong Province, China

Corresponding author: Xing-Jie Shen, MD, Chief Doctor, Department of Gastroenterology, Central Hospital Affiliated to Shandong First Medical University, No. 105 Jiefang Road, Lixia District, Jinan 250011, Shandong Province, China. starshen@sina.com

Abstract

BACKGROUND

Malignant peritoneal mesothelioma (MPM) originates from the mesothelial and subcutaneous cells of the abdominal cavity. Its diagnose is difficult due to its nonspecific and vague symptoms, and it should be differentiated from alcoholic cirrhosis and liver and pancreatic cancers. Misdiagnosis and missed diagnosis can easily occur when MPM presents with other diseases. To the best of our knowledge, no case of MPM concurrent with alcoholic cirrhosis has been reported.

CASE SUMMARY

A 63-year-old man presented to our hospital with abdominal distension for 20 days. He had a history of alcohol consumption for nearly 30 years and no history of special drug use or toxic exposure. After treatment for alcoholic cirrhosis in a community hospital, his symptoms did not improve significantly. The patient underwent exploratory laparotomy and surgical resection. Pathologic examination showed an epithelioid MPM. He was treated with chemotherapy and intraperitoneal hyperthermic perfusion after surgery. Currently, he is in a stable condition and tumor recurrence has not occurred.

CONCLUSION

Misdiagnosis and missed diagnosis of MPM can easily occur because of its insidious onset. Therefore, there is a need to understand. MPM in clinical practice, make the correct diagnosis, and provide timely and effective treatment.

Key Words: Malignant peritoneal mesothelioma; Abdominal distension; Ascites; Cirrhosis; Computed tomography; Case report

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

Core Tip: Malignant peritoneal mesothelioma (MPM) is a rare disease with nonspecific and vague symptoms. MPM concurrent with alcoholic cirrhosis has not been reported previously. We report the case of a 63-year-old man who had abdominal distension and was initially diagnosed with alcoholic cirrhosis. His symptoms did not improve significantly after treatment for the cirrhosis. The patient then underwent exploratory laparotomy, and pathologic examination showed an epithelioid MPM. Misdiagnosis and missed diagnosis of MPM is common because of its insidious onset. Clinicians should be aware of the disease and make a correct diagnosis so as to provide patients with timely and effective treatment. MPM concurrent with alcoholic cirrhosis is rare and requires further study.

Citation: Liu L, Zhu XY, Zong WJ, Chu CL, Zhu JY, Shen XJ. Concurrent alcoholic cirrhosis and malignant peritoneal mesothelioma in a patient: A case report. *World J Clin Cases* 2022; 10(19): 6716-6721

URL: <https://www.wjgnet.com/2307-8960/full/v10/i19/6716.htm>

DOI: <https://dx.doi.org/10.12998/wjcc.v10.i19.6716>

INTRODUCTION

Malignant peritoneal mesothelioma (MPM) is a rare malignancy originating from the peritoneal epithelium or mesothelium. The annual incidence of the tumor in the general population is 1-2 cases per million, and it was first reported in 1908[1]. In recent years, studies have shown that the incidence of the MPM in those with asbestos exposure is significantly higher than that in those without asbestos exposure[2]. Pathological and immunohistochemical examinations are the gold standards for its diagnosis. MPM has a hidden onset, and the clinical symptoms of patients are not typical; therefore, missed diagnosis and misdiagnosis may occur. Here, we here report a case where the clinical manifestations, such as abdominal distension and ascites and abdominal imaging findings, were consistent with alcoholic cirrhosis, due to which the diagnosis of MPM was missed.

CASE PRESENTATION

Chief complaints

A 63-year-old man presented to our hospital with a history of abdominal distension for 20 d.

History of present illness

The patient's abdominal distension was persistent and worsened after meals. He vomited an average of 1-2 times per day, with no coffee ground vomitus. He was diagnosed with multiple hepatic cysts, alcoholic cirrhosis, and ascites by abdominal computed tomography (CT) in a community hospital. After treatment for alcoholic cirrhosis, the patient's symptoms did not improve significantly.

History of past illness

The patient had a history of schizophrenia for many years, and he denied a history of other diseases and surgery. The patient also had a history of alcohol consumption for nearly 30 years, with no history of special drug use or toxic exposure. He was diagnosed with hepatic cirrhosis by a liver biopsy 3 years ago.

Personal and family history

The patient did not report any personal and family history.

Physical examination

Physical examination on admission showed abdominal distension, full abdominal tenderness, and dullness in movement, but no splenomegaly was observed.

Laboratory examinations

Laboratory tests results were as follows: White blood cell count $7.59 \times 10^9/L$, platelet count $507 \times 10^9/L$, hemoglobin level 105 g/L, C-reactive protein 32.29 mg/L, erythrocyte sedimentation 51 mm/h, procalcitonin 0.82 ng/mL, albumin 33.9 g/L and D-dimer level of 2.15 mg/L. Exudate was detected in the examination of ascites, and the serum ascites albumin gradient level was 9.2 g/L. Results of other

laboratory tests, including carcinoembryonic antigen, alpha fetoprotein, carbohydrate antigen 125, carbohydrate antigen 19-9, carbohydrate antigen 50, antinuclear antibody, anti-mitochondrial antibody, anti dsDNA antibody, alanine aminotransferase, aspartate aminotransferase, alkaline phosphatase, gamma-glutamyl transpeptidase, coagulation function, hepatitis B surface antigen, and hepatitis C antibody were unremarkable. Malignant tumor cells were found in the exfoliated cells of ascites.

Imaging examinations

Contrast-enhanced CT scan confirmed the findings of the CT scan at the community hospital (Figure 1A). More importantly, a large amount of fluid was observed in the abdominal cavity, and the right peritoneum was irregularly thickened with nodular thickening of the greater omentum (Figure 1B).

FINAL DIAGNOSIS

The patient then underwent exploratory laparotomy and a large amount of yellowish ascites was found in the abdominal cavity. There were extensive adhesions between the diaphragm, stomach, spleen and abdominal wall of the liver. Adhesions were severe in most of the small intestine and the mesentery was contracted. The greater omentum was pancake-shaped, multiple round masses were observed in the parietal and visceral peritoneum, with a diameter of 3-20 mm, and the right subphrenic peritoneum was thickened considerably, with an area of approximately 15 cm × 15 cm (Figure 2). Tumors over 3 mm in diameter, the partial right subphrenic peritoneum, and the greater omentum were resected. Pathologic examination showed an epithelioid MPM (Figure 3).

TREATMENT

In addition to general comprehensive treatments, the patient was administered pemetrexed in combination with cisplatin and intraperitoneal hyperthermic perfusion after surgery.

OUTCOME AND FOLLOW-UP

At present, the patient has been followed up for 11 mo, and he is in stable condition with no tumor recurrence.

DISCUSSION

MPM is a malignant tumor originating from mesothelial and subcutaneous cells of the abdominal cavity. Histologically, there are epithelioid, sarcomatoid, and biphasic types of MPM[3]. There is no significant difference in the degree of malignancy among the above types. Elderly men are at high risk for developing MPM. Recently, cases of MPM in young adults have also been reported[4]. MPM is a rare entity and has been linked to industrial pollutants and mineral exposure. There has been an increase in diffusion of chemicals and the incidence of cancer. The most common carcinogen associated with MPM is asbestos, with approximately 80% of cases being associated with asbestos exposure[5,6]. The pathogenesis of MPM is unknown. A *BAP1* mutation has been revealed in some patients with MPM by gene analyses, but it was not the only gene involving inherited predisposition to MPM[7]. MPM has insidious onset, and the most common initial symptoms of MPM are abdominal pain, abdominal distension, significant weight loss, ascites, anorexia, and night sweat[8]. Some patients have concurrent paraneoplastic syndromes associated with MPM, such as hypoglycemia, thrombocytosis, venous thrombosis, paraneoplastic liver disease, and wasting syndrome[8]. The diagnosis of MPM is difficult due to its nonspecific and vague symptoms and should be differentiated from alcoholic cirrhosis, as well as liver and pancreatic cancers. Serological tests and tumor markers are of little value, while, there is no specific imaging technique for the detection of MPM. Currently, CT, especially the contrast-enhanced CT, is widely used, with extensive and irregular thickening of the peritoneum, mesentery, and omentum accompanied by massive peritoneal effusion being the typical manifestations of MPM in a CT scan. Positron emission tomography (PET-CT) is valuable in early diagnosis, evaluation of curative effect, and judgment of distant metastasis. The prognosis of patients with MPM is poor. Tumor resection or palliative resection is preferred in the early stage. Pemetrexed combined with cisplatin is a widely accepted chemotherapy for inoperable patients. More clinical trials are needed to investigate the promising treatment of immunotherapy and targeted therapy[9].

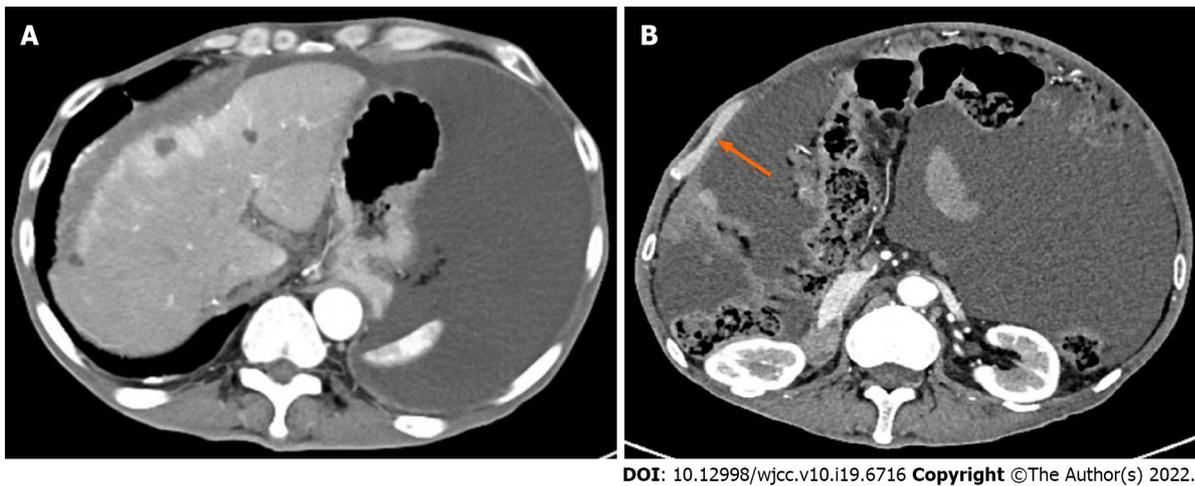


Figure 1 Computed tomography images. A: Abdominal computed tomography revealed multiple hepatic cysts, liver cirrhosis and ascites; B: The right peritoneum was irregularly thickened.

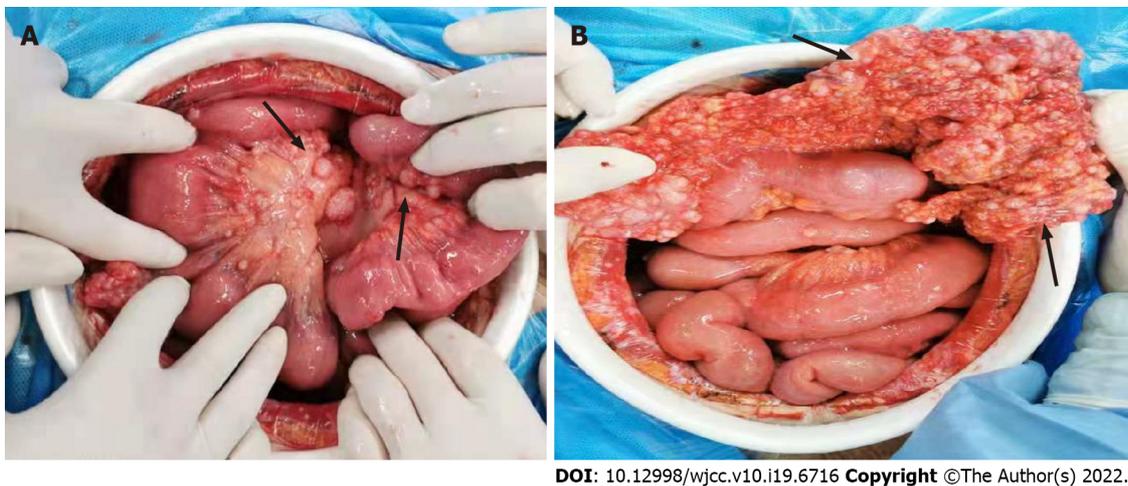


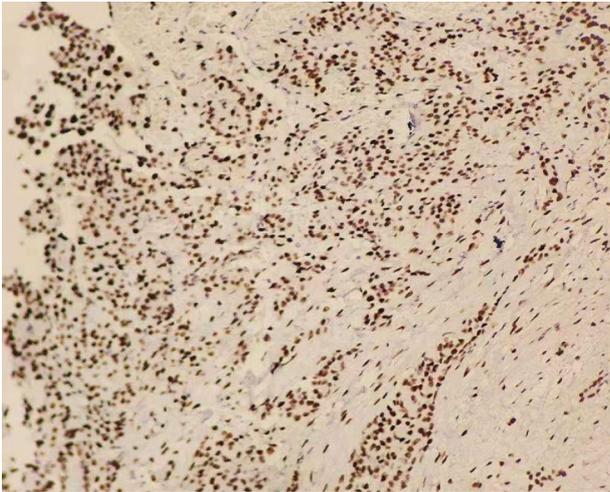
Figure 2 The greater omentum was pancake-shaped, multiple round masses were observed in the parietal and visceral peritoneum, with a diameter of 3-20 mm and the right subphrenic peritoneum was thickened obviously, with an area of about 15 cm × 15 cm.

In the present case, the patient had a history of long-term alcohol consumption, and the CT scan showed cirrhosis and ascites, which resulted in a diagnosis of alcoholic cirrhosis in the community hospital. After the patient was transferred to our hospital due to poor treatment effect, we performed a contrast-enhanced CT examination and an ascites cytology test, which confirmed the MPM diagnosis. Therefore, a correct diagnosis of rare diseases, including MPM, is always necessary to adjust the treatments plan in a timely manner.

There are some limitations in this report. First, the relationship between alcoholic cirrhosis and MPM remains unknown. Further studies are needed to determine whether there is a correlation between the two diseases. Second, a long-term follow-up remains necessary.

CONCLUSION

MPM is subjected to misdiagnosis and missed diagnosis because of its insidious onset. Clinicians should be aware of the disease and make a correct diagnosis to provide patients with timely and effective treatment. At the same time, further research on the pathogenesis of the MPM is urgently needed.



DOI: 10.12998/wjcc.v10.i19.6716 Copyright ©The Author(s) 2022.

Figure 3 Pathological and immunohistochemical examinations showed an epithelioid malignant peritoneal mesothelioma.

FOOTNOTES

Author contributions: Liu L, Zhu XY, Zong WJ contributed equally to this work; Shen XJ, Zhu XY, Zong WJ, Chu CL and Liu L collected patient data; Liu L drafted the manuscript; Chu CL and Zhu JY revised the manuscript; all authors read and approved the final manuscript.

Supported by Shandong Province Medical and Health Science and Technology Development Plan, No. 202003030878.

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.

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: Liang Liu 0000-0002-7623-444X; Xiao-Yan Zhu 0000-0002-0026-6488; Wen-Jie Zong 0000-0001-7366-1502; Chuan-Lian Chu 0000-0001-9320-2311; Jing-Yu Zhu 0000-0002-1693-7370; Xing-Jie Shen 0000-0002-1340-7171.

S-Editor: Liu JH

L-Editor: A

P-Editor: Liu JH

REFERENCES

- 1 **Hernaes R**, Hamilton JP. Unexplained ascites. *Clin Liver Dis (Hoboken)* 2016; **7**: 53-56 [PMID: 31041029 DOI: 10.1002/cld.537]
- 2 **Benzerdjeb N**, Dartigues P, Kepenekian V, Valmary-Degano S, Mery E, Averous G, Chevallier A, Laverriere MH, Villa I, Sallé FG, Villeneuve L, Glehen O, Isaac S, Hommell-Fontaine J; RENAPE Network. Combined grade and nuclear grade are prognosis predictors of epithelioid malignant peritoneal mesothelioma: a multi-institutional retrospective study. *Virchows Arch* 2021; **479**: 927-936 [PMID: 34169365 DOI: 10.1007/s00428-021-03144-z]
- 3 **Ren H**, Rassekh SR, Lacson A, Lee CH, Dickson BC, Chung CT, Lee AF. Malignant Mesothelioma With *EWSR1-ATF1* Fusion in Two Adolescent Male Patients. *Pediatr Dev Pathol* 2021; **24**: 570-574 [PMID: 34121509 DOI: 10.1177/10935266211021222]
- 4 **Kim J**, Bhagwandin S, Labow DM. Malignant peritoneal mesothelioma: a review. *Ann Transl Med* 2017; **5**: 236 [PMID: 28706904 DOI: 10.21037/atm.2017.03.96]

- 5 **Teta MJ**, Mink PJ, Lau E, Scurman BK, Foster ED. US mesothelioma patterns 1973-2002: indicators of change and insights into background rates. *Eur J Cancer Prev* 2008; **17**: 525-534 [PMID: [18941374](#) DOI: [10.1097/CEJ.0b013e3282f0c0a2](#)]
- 6 **Attanoos RL**, Churg A, Galateau-Salle F, Gibbs AR, Roggli VL. Malignant Mesothelioma and Its Non-Asbestos Causes. *Arch Pathol Lab Med* 2018; **142**: 753-760 [PMID: [29480760](#) DOI: [10.5858/arpa.2017-0365-RA](#)]
- 7 **Pagliuca F**, Zito Marino F, Morgillo F, Della Corte C, Santini M, Vicidomini G, Guggino G, De Dominicis G, Campione S, Accardo M, Cozzolino I, Franco R. Inherited predisposition to malignant mesothelioma: germline BAP1 mutations and beyond. *Eur Rev Med Pharmacol Sci* 2021; **25**: 4236-4246 [PMID: [34227091](#) DOI: [10.26355/eurrev_202106_26129](#)]
- 8 **Bridda A**, Padoan I, Mencarelli R, Frego M. Peritoneal mesothelioma: a review. *MedGenMed* 2007; **9**: 32 [PMID: [17955087](#)]
- 9 **Salo SAS**, Ilonen I, Laaksonen S, Myllärniemi M, Salo JA, Rantanen T. Malignant Peritoneal Mesothelioma: Treatment Options and Survival. *Anticancer Res* 2019; **39**: 839-845 [PMID: [30711965](#) DOI: [10.21873/anticancer.13183](#)]



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>

