

# World Journal of *Clinical Cases*

*World J Clin Cases* 2023 June 26; 11(18): 4210-4457



**REVIEW**

- 4210 Should gastroenterologists prescribe cannabis? The highs, the lows and the unknowns  
*Samuel S, Michael M, Tadros M*

**MINIREVIEWS**

- 4231 Application of artificial intelligence in trauma orthopedics: Limitation and prospects  
*Salimi M, Parry JA, Shahrokhi R, Mosalamiaghili S*
- 4241 Weight loss maintenance after bariatric surgery  
*Cho YH, Lee Y, Choi JI, Lee SR, Lee SY*
- 4251 Bicuspid aortic valve with associated aortopathy, significant left ventricular hypertrophy or concomitant hypertrophic cardiomyopathy: A diagnostic and therapeutic challenge  
*Sopek Merkaš I, Lakušić N, Predrijevac M, Štambuk K, Hrabak Paar M*
- 4258 Application experience and research progress of different emerging technologies in plastic surgery  
*Yang B, Yang L, Huang WL, Zhou QZ, He J, Zhao X*

**ORIGINAL ARTICLE****Case Control Study**

- 4267 Multimodal integrated intervention for children with attention-deficit/hyperactivity disorder  
*Lv YB, Cheng W, Wang MH, Wang XM, Hu YL, Lv LQ*

**Retrospective Study**

- 4277 Portal vein computed tomography imaging characteristics and their relationship with bleeding risk in patients with liver cirrhosis undergoing interventional therapy  
*Song XJ, Liu JL, Jia SY, Zhang K*

**Observational Study**

- 4287 Wrist-ankle acupuncture combined with pain nursing for the treatment of urinary calculi with acute pain  
*Wu LM, Liu Q, Yin XH, Yang LP, Yuan J, Zhang XQ, Wang YL*

**CASE REPORT**

- 4295 Coexistence of diffuse large B-cell lymphoma, acute myeloid leukemia, and untreated lymphoplasmacytic lymphoma/waldenström macroglobulinemia in a same patient: A case report  
*Zhang LB, Zhang L, Xin HL, Wang Y, Bao HY, Meng QQ, Jiang SY, Han X, Chen WR, Wang JN, Shi XF*
- 4306 Collagen fleece (Tachosil®) for treating testis torsion: A case report  
*Kim KM, Kim JH*

- 4313 Morphological features and endovascular repair for type B multichanneled aortic dissection: A case report  
*Lu WF, Chen G, Wang LX*
- 4318 Hepatic inflammatory myofibroblastic tumor: A case report  
*Tong M, Zhang BC, Jia FY, Wang J, Liu JH*
- 4326 Endometriosis of the lung: A case report and review of literature  
*Yao J, Zheng H, Nie H, Li CF, Zhang W, Wang JJ*
- 4334 Delayed dislocation of the radial head associated with malunion of distal radial fracture: A case report  
*Kim KB, Wang SI*
- 4341 Synchronous endometrial and ovarian cancer: A case report  
*Žilovič D, Čiurlienė R, Šidlovská E, Vaicekauskaitė I, Sabaliauskaitė R, Jarmalaitė S*
- 4350 Nivolumab-induced tumour-like gastritis: A case report  
*Cijauskaite E, Kazenaite E, Strainiene S, Sadauskaite G, Kurlinkus B*
- 4360 Solitary thyroid gland metastasis from rectal cancer: A case report and review of the literature  
*Chen Y, Kang QS, Zheng Y, Li FB*
- 4368 Anesthesia for extracorporeal membrane oxygenation-assisted thoracoscopic lower lobe subsegmental resection in a patient with a single left lung: A case report  
*Wang XF, Li ZY, Chen L, Chen LX, Xie F, Luo HQ*
- 4377 Indium chloride bone marrow scintigraphy for hepatic myelolipoma: A case report  
*Sato A, Saito K, Abe K, Sugimoto K, Nagao T, Sukeda A, Yunaiyama D*
- 4384 Fibromatosis-like metaplastic carcinoma of the breast: Two case reports  
*Bao WY, Zhou JH, Luo Y, Lu Y*
- 4392 Perforating and ophthalmic artery variants from the anterior cerebral artery: Two case reports  
*Mo ZX, Li W, Wang DF*
- 4397 Diagnostic use of superb microvascular imaging in evaluating septic arthritis of the manubriosternal joint: A case report  
*Seskute G, Kausaite D, Chalkovskaja A, Bulotaite E, Butrimiene I*
- 4406 Primary prostate Burkitt's lymphoma resected with holmium laser enucleation of the prostate: A rare case report  
*Wu YF, Li X, Ma J, Ma DY, Zeng XM, Yu QW, Chen WG*
- 4412 Pancreatitis, panniculitis and polyarthritides syndrome: A case report  
*Pichler H, Stumpner T, Schiller D, Bischofreiter M, Ortmaier R*
- 4419 Acute neck tendonitis with dyspnea: A case report  
*Wu H, Liu W, Mi L, Liu Q*

- 4425 Next-generation sequencing technology for the diagnosis of *Pneumocystis* pneumonia in an immunocompetent female: A case report  
*Huang JJ, Zhang SS, Liu ML, Yang EY, Pan Y, Wu J*
- 4433 Superior laryngeal nerve block for treatment of throat pain and cough following laryngeal herpes zoster: A case report  
*Oh J, Park Y, Choi J, Jeon Y*
- 4438 Removal of unexpected schwannoma with superficial parotidectomy using modified-Blair incision and superficial musculoaponeurotic system folding: A case report  
*Nam HJ, Choi HJ, Byeon JY, Wee SY*
- 4446 Simultaneously metastatic cholangiocarcinoma and small intestine cancer from breast cancer misdiagnosed as primary cholangiocarcinoma: A case report  
*Jiao X, Zhai MM, Xing FZ, Wang XL*

**LETTER TO THE EDITOR**

- 4454 Erroneous presentation of respiratory-hemodynamic disturbances and postsurgical inflammatory responses in patients having undergone abdominal cavity cancer surgery  
*Idrissov KS, Mynbaev OA*

**ABOUT COVER**

Editorial Board Member of *World Journal of Clinical Cases*, Guoping Zheng, MD, PhD, Associate Professor, Faculty of Medicine and Health, Sydney Medical School-Westmead Clinical School, The University of Sydney, Sydney 2145, Australia. [guoping.zheng@sydney.edu.au](mailto:guoping.zheng@sydney.edu.au)

**AIMS AND SCOPE**

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

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

**INDEXING/ABSTRACTING**

The *WJCC* is now abstracted and indexed in Science Citation Index Expanded (SCIE, also known as SciSearch®), Journal Citation Reports/Science Edition, Current Contents®/Clinical Medicine, PubMed, PubMed Central, Reference Citation Analysis, China National Knowledge Infrastructure, China Science and Technology Journal Database, and Superstar Journals Database. The 2022 Edition of Journal Citation Reports® cites the 2021 impact factor (IF) for *WJCC* as 1.534; IF without journal self cites: 1.491; 5-year IF: 1.599; Journal Citation Indicator: 0.28; Ranking: 135 among 172 journals in medicine, general and internal; and Quartile category: Q4.

**RESPONSIBLE EDITORS FOR THIS ISSUE**

Production Editor: *Ying-Yi Yuan*; Production Department Director: *Xu Guo*; Editorial Office Director: *Jin-Lei Wang*.

**NAME OF JOURNAL**

*World Journal of Clinical Cases*

**ISSN**

ISSN 2307-8960 (online)

**LAUNCH DATE**

April 16, 2013

**FREQUENCY**

Thrice Monthly

**EDITORS-IN-CHIEF**

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

**EDITORIAL BOARD MEMBERS**

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

**PUBLICATION DATE**

June 26, 2023

**COPYRIGHT**

© 2023 Baishideng Publishing Group Inc

**INSTRUCTIONS TO AUTHORS**

<https://www.wjgnet.com/bpg/gerinfo/204>

**GUIDELINES FOR ETHICS DOCUMENTS**

<https://www.wjgnet.com/bpg/GerInfo/287>

**GUIDELINES FOR NON-NATIVE SPEAKERS OF ENGLISH**

<https://www.wjgnet.com/bpg/gerinfo/240>

**PUBLICATION ETHICS**

<https://www.wjgnet.com/bpg/GerInfo/288>

**PUBLICATION MISCONDUCT**

<https://www.wjgnet.com/bpg/gerinfo/208>

**ARTICLE PROCESSING CHARGE**

<https://www.wjgnet.com/bpg/gerinfo/242>

**STEPS FOR SUBMITTING MANUSCRIPTS**

<https://www.wjgnet.com/bpg/GerInfo/239>

**ONLINE SUBMISSION**

<https://www.f6publishing.com>

## Indium chloride bone marrow scintigraphy for hepatic myelolipoma: A case report

Akio Sato, Kazuhiro Saito, Koichiro Abe, Katsutoshi Sugimoto, Toshitaka Nagao, Aoi Sukeda, Daisuke Yunaiyama

**Specialty type:** Medicine, research and experimental

**Provenance and peer review:** Unsolicited article; Externally peer reviewed.

**Peer-review model:** Single blind

**Peer-review report's scientific quality classification**

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

**P-Reviewer:** Jeong KY, South Korea; Shuang W, China

**Received:** March 13, 2023

**Peer-review started:** March 13, 2023

**First decision:** April 19, 2023

**Revised:** May 2, 2023

**Accepted:** May 22, 2023

**Article in press:** May 22, 2023

**Published online:** June 26, 2023



**Akio Sato, Kazuhiro Saito, Koichiro Abe, Daisuke Yunaiyama,** Department of Radiology, Tokyo Medical University Hospital, Shinjuku-ku 160-0023, Tokyo, Japan

**Katsutoshi Sugimoto,** Department of Gastroenterology and Hepatology, Tokyo Medical University Hospital, Shinjuku-ku 160-0023, Tokyo, Japan

**Toshitaka Nagao, Aoi Sukeda,** Department of Anatomic Pathology, Tokyo Medical University Hospital, Shinjuku-ku 160-0023, Tokyo, Japan

**Corresponding author:** Akio Sato, MD, Doctor, Department of Radiology, Tokyo Medical University Hospital, 6-7-1 Nishishinjuku, Shinjuku-ku 160-0023, Tokyo, Japan.

[sato.akio.8j@tokyo-med.ac.jp](mailto:sato.akio.8j@tokyo-med.ac.jp)

### Abstract

#### BACKGROUND

As hepatic myelolipoma is rarely encountered, its radiological diagnosis using ultrasonography (US), computed tomography (CT), and magnetic resonance imaging (MRI) is challenging. Hepatic myelolipoma is similar to fat-contained hepatic lesions seen in hepatocellular carcinoma and angiomyolipoma. Therefore, further development of techniques to diagnose hepatic myelolipoma is warranted.

#### CASE SUMMARY

A 44-year-old obese man was found to have a hepatic lesion during his medical checkup. The lesion was 50 mm × 57 mm in size and was detected in segment 8 (S8) of the liver by US. The patient was diagnosed with hepatic lesion 20 years ago, but it was left unresolved. The patient had no symptoms, liver dysfunction, hepatitis virus antibody, or tumor marker elevation. Plain CT showed a well-defined lesion in S8 of the liver. The central and peripheral areas of the lesion primarily exhibited fat density and hypodensity, respectively. MRI revealed a capsule-like structure. Biopsy was performed to address the probability of hepatocellular carcinoma. The lesion was pathologically confirmed as a myelolipoma. Bone marrow scintigraphy performed using <sup>111</sup>InCl<sub>3</sub> revealed accumulation of the radiopharmaceutical in the soft tissue component, except in the fat-dominant part of the tumor, as well as in the surrounding liver parenchyma due to the presence of reticuloendothelial cells in the liver.

#### CONCLUSION

This is the first report on the diagnosis of hepatic myelolipoma using <sup>111</sup>InCl<sub>3</sub>.

scintigraphy. The effectiveness of bone marrow scintigraphy for diagnosing hepatic myelolipoma might be limited. As radiopharmaceuticals accumulate in both hematopoietic and reticuloendothelial cells, the accumulation of radiopharmaceuticals in the lesion is obscure.

**Key Words:** Liver;  $^{111}\text{InCl}_3$ ; Myelolipoma; Magnetic resonance imaging; Benign tumor; Case report

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

**Core Tip:** We attempted to perform bone marrow scintigraphy for hepatic myelolipoma to determine whether  $^{111}\text{InCl}_3$  accumulates in the lesion. We found that the radiopharmaceutical accumulated in the soft tissue component, except for the fat-dominant part. However, the radiopharmaceutical also accumulated in the surrounding liver parenchyma, which comprised reticuloendothelial cells. Therefore, the effectiveness of bone marrow scintigraphy in diagnosing hepatic myelolipoma may be limited.

**Citation:** Sato A, Saito K, Abe K, Sugimoto K, Nagao T, Sukeda A, Yunaiyama D. Indium chloride bone marrow scintigraphy for hepatic myelolipoma: A case report. *World J Clin Cases* 2023; 11(18): 4377-4383

**URL:** <https://www.wjgnet.com/2307-8960/full/v11/i18/4377.htm>

**DOI:** <https://dx.doi.org/10.12998/wjcc.v11.i18.4377>

## INTRODUCTION

Myelolipoma is a rare, nonfunctioning benign tumor that comprises mature fat tissue and hematopoietic cells. It is usually detected in the adrenal cortex and rarely outside the adrenal gland. When the lesion develops outside the adrenal gland, it is most often detected in the anterior sacral region[1]. According to previous reports, myelolipomas of liver origin are lesions with fatty and soft tissue density components accompanied by capsular-like structures[2-4]. Therefore, it is crucial to differentiate it from other tumors, including hepatocellular carcinoma. Yamamoto *et al*[5] reported that bone marrow scintigraphy is helpful in the diagnosis of adrenal myelolipoma as indium chloride ( $^{111}\text{InCl}_3$ ) accumulates in hematopoietic cells in myelolipoma[5]. However, no study has diagnosed hepatic myelolipoma with bone marrow scintigraphy. In this study, we report a rare case of hepatic myelolipoma who underwent various imaging techniques, including bone marrow scintigraphy.

## CASE PRESENTATION

### **History of present illness**

This study included a 44-year-old obese male (BMI 32.0) who showed no symptoms. Twenty years ago, he was diagnosed with a hepatic mass but the mass was not treated. In July 2020, during an abdominal ultrasound examination at a medical checkup, a 50 mm × 57 mm hyperechoic lesion was observed in segment 8 (S8) of the liver. He came to our hospital with suspected hepatocellular carcinoma.

### **History of past illness**

The patient developed systemic lupus erythematosus and lupus nephritis aged 24 years, and type 2 diabetes and hypertension aged 32 years.

### **Physical examination**

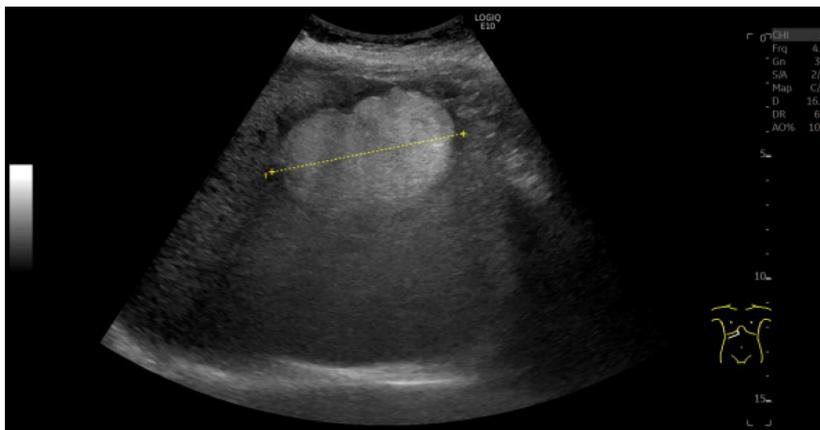
Physical examination was normal.

### **Laboratory examinations**

His blood tests showed mild inflammatory reaction and renal dysfunction but no liver dysfunction. The patient did not have hepatitis virus or tumor marker elevation. Urinalysis showed mildly elevated urine protein but no other abnormalities.

### **Imaging examinations**

Ultrasonography (US) revealed a hyperechoic mass with a 79 mm oval halo in S8 of the liver (Figure 1). An abdominal plain computed tomography (CT) scan indicated a heterogeneous low-density mass with internal fat (Figure 2). The patient suffered from renal dysfunction and could not undergo contrast-enhanced CT. We performed abdominal magnetic resonance imaging (MRI) of the T1-weighted image



DOI: 10.12998/wjcc.v11.i18.4377 Copyright ©The Author(s) 2023.

**Figure 1 Ultrasonography.** The image shows the hyperechoic lesion in segment 8 of the liver. The lesion size was 79 mm × 73 mm × 52 mm.



DOI: 10.12998/wjcc.v11.i18.4377 Copyright ©The Author(s) 2023.

**Figure 2 Plain computed tomography.** The image shows a well-defined lesion in segment 8 of the liver. The center of the lesion mainly shows the fat density and the peripheral area of the lesion shows hypodensity.

using the Dixon method. The T1-weighted opposed phase image showed an apparent signal drop in the peripheral area of the lesion. The center of the lesion showed a predominant fat component, and the surrounding area showed a mixed fat component. The T2-weighted image showed hyperintensity, the diffusion-weighted image (DWI) showed a hyperintensity area in the peripheral region of the lesion, and the apparent diffusion coefficient (ADC) map showed hypointensity corresponding to the hyperintensity area on DWI, which indicated restricted diffusion. The central fat-predominant area showed hypointensity on the DWI and mixed hypo- and hyper-intensity on the ADC map (Figure 3).

### Pathology

The lesion contained erythroblastosis cells on glycophorin C staining, granulocytic cells on myeloperoxidase staining, and megakaryocytes on CD61 immunostaining. Hematoxylin and eosin staining showed fat droplet deposition in the background liver tissue, which suggested chronic liver inflammation (Figure 4).

---

## FINAL DIAGNOSIS

---

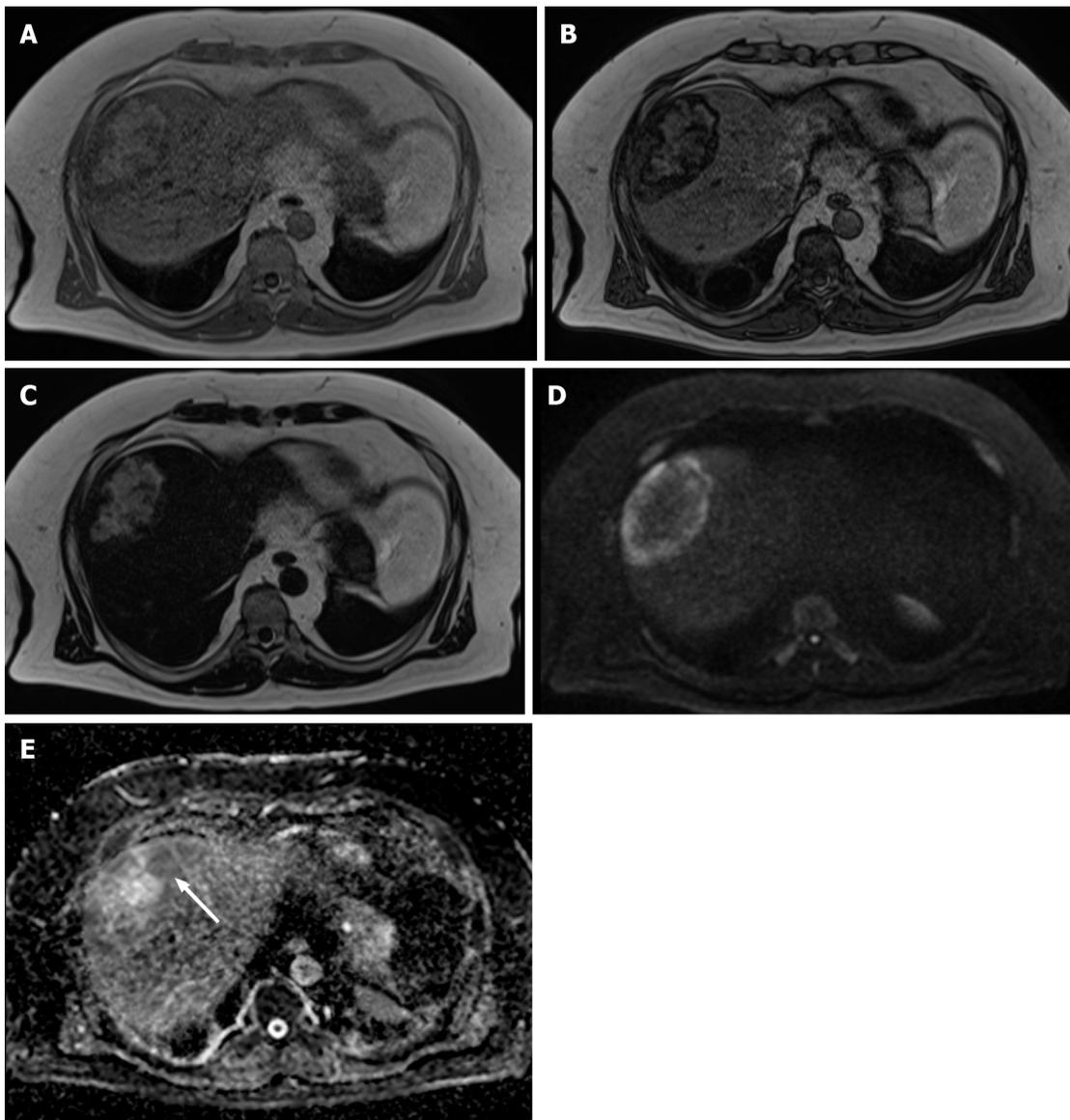
Hepatic myelolipoma with background tissue of nonalcoholic fatty liver disease.

---

## TREATMENT

---

The patient had no subjective symptoms and few objective symptoms. The clinician then had consent to follow-up with the patient.



DOI: 10.12998/wjcc.v11.i18.4377 Copyright ©The Author(s) 2023.

**Figure 3 Plain magnetic resonance imaging.** A: T1-weighted in phase image shows hyperintensity at the center area and hypointensity at the peripheral area of the lesion compared with the background liver parenchyma; B: T1-weighted opposed phase image demonstrates an apparent signal drop in the peripheral area of the lesion and a heterogeneous signal drop at the center of the lesion; C: T2-weighted image shows the lesion's center hyperintensity equal to subcutaneous fat. The peripheral area of the lesion shows mild hyperintensity; D: Diffusion-weighted image shows the peripheral area of the lesion and hyperintensity on the diffusion-weighted image. The center of the fat-dominant area shows hypointensity; E: Apparent diffusion coefficient map shows the peripheral area of the lesion hypointensity (white arrow). This indicates that the diffusion in this area is restricted.

## OUTCOME AND FOLLOW-UP

The patient was diagnosed with myelolipoma and underwent bone marrow scintigraphy with  $^{111}\text{InCl}_3$  to confirm the presence of bone-marrow elements radiologically (Table 1).  $^{111}\text{InCl}_3$  bone marrow scintigraphy showed a mild accumulation of radiopharmaceutical in areas of poor fatty tissue in the peripheral region of the lesion. The radiopharmaceutical accumulation was absent in the center of the mass corresponding to the fat-dominant part.  $^{111}\text{InCl}_3$  also mildly accumulated in the bone marrow and spleen (Figure 5). The tumor was in a stable condition and did not cause new symptoms.

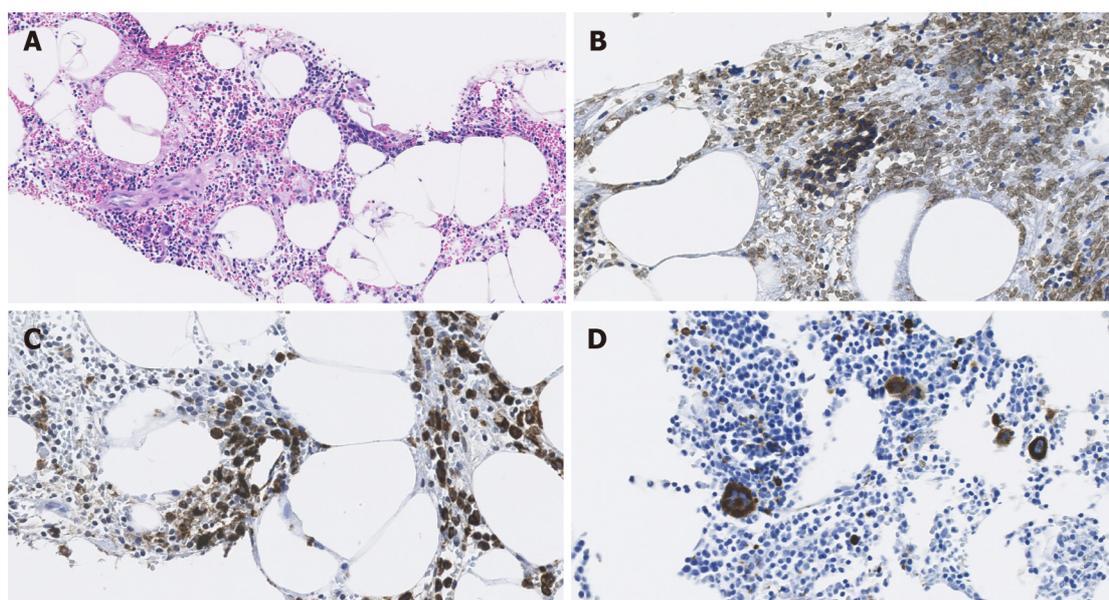
## DISCUSSION

This is the first report to diagnose a case of hepatic myelolipoma with  $^{111}\text{InCl}_3$  scintigraphy. The etiology of hepatic myelolipoma is unknown, but several hypotheses exist. Among the most promising ideas are that it is due to an ectopic adrenal gland, an alteration of hepatocytes, or embryonic stem cells remaining in the liver[1,4]. Extra-adrenal myelolipomas tend to occur after middle age, with a male-to-

Table 1 Timeline of the case

First indication	Twenty years ago
Second indication	One month ago
Referred to our hospital and ultrasound examination	Day 0
Magnetic resonance cholangiopancreatography	Day 23
Biopsy	Day 75
Hepatic MRI	Day 287
<sup>111</sup> InCl <sub>3</sub> scintigraphy and single-photon emission computed tomography/CT	Day 662

MRI: Magnetic resonance imaging; CT: Computed tomography.



DOI: 10.12998/wjcc.v11.i18.4377 Copyright ©The Author(s) 2023.

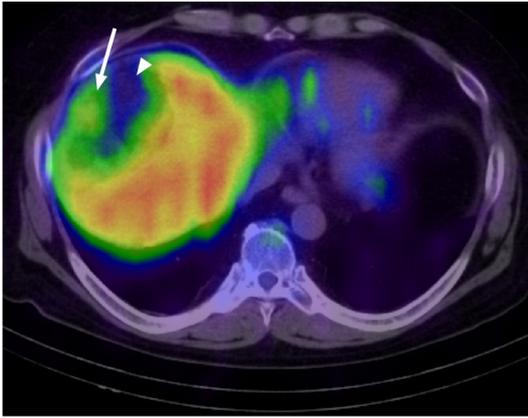
**Figure 4** Histological and immunohistochemical findings. A: Hematoxylin and eosin staining with  $\times 400$  magnification of the specimen from biopsy to the lesion shows the adipose tissue (lucent areas) within the hematopoietic element; B: Glycophorin C staining with  $\times 400$  magnification field indicates the presence of erythroid cells (brown stained); C: Myeloperoxidase staining with  $\times 400$  magnification field shows the presence of myelocytes (brown stained); D: CD61 immunostaining with  $\times 400$  magnification field demonstrates the presence of megakaryocytes (brown stained).

female ratio of 1:2[4]. Myelolipoma is usually asymptomatic in the case of a small lesion, but spontaneous rupture due to mass effect, acute abdomen, and bleeding may occur as the lesion grows [1]. Resection is unnecessary unless the diagnosis is unclear or the lesion is symptomatic[6].

The radiological diagnosis of hepatic myelolipoma using US, CT, and MRI is challenging. Myelolipoma has a capsule-like structure at the lesion periphery and intratumoral fat[4]. These radiological findings are similar to hepatocellular carcinoma. Therefore, we used bone marrow scintigraphy to facilitate the distinction between these two entities[5,7].

Bone marrow scintigraphy showed accumulation of the radiopharmaceutical in the lesion's soft tissue components, except for the fat-dominant part. Therefore, the efficacy of the radiopharmaceutical was confirmed. However, the conspicuity of the accumulation of radiopharmaceutical was weak because it accumulated in the surrounding liver parenchyma owing to the presence of reticuloendothelial cells[6].

<sup>111</sup>InCl<sub>3</sub> radiopharmaceutical accumulates in bone marrow and the reticuloendothelial system in the liver parenchyma[8]. Therefore, <sup>111</sup>InCl<sub>3</sub> may mildly accumulate in well-differentiated hepatocellular carcinoma as in myelolipoma as it accumulates in the reticuloendothelial system. This prediction is based on previous reports indicating that superparamagnetic iron oxide (SPIO) accumulates in well-differentiated hepatocellular carcinoma with reticuloendothelial cells on SPIO-enhanced MRI[9]. Such hepatocellular carcinomas have less aggressiveness[10]. To our knowledge, no study has applied <sup>111</sup>InCl<sub>3</sub> to diagnose hepatocellular carcinoma. However, it could be suggested that hepatic lesions with an accumulation of <sup>111</sup>InCl<sub>3</sub> are less aggressive as the differential diagnosis includes myelolipoma and well-differentiated hepatocellular carcinoma.



DOI: 10.12998/wjcc.v11.i18.4377 Copyright ©The Author(s) 2023.

**Figure 5 A fusion image with single photon emission computed tomography using  $^{111}\text{InCl}_3$  and computed tomography.** The image shows the mild accumulation of radiopharmaceutical in the peripheral area of the lesion (white arrow). Poor accumulation was observed in the central region corresponding to the dominant fat area (white arrowhead).

---

## CONCLUSION

Bone marrow scintigraphy has limited utility in diagnosing hepatic myelolipoma. As radiopharmaceuticals accumulate in both hematopoietic and reticuloendothelial cells, the accumulation of radiopharmaceuticals in the lesion is obscure.

---

## FOOTNOTES

**Author contributions:** Sato A designed the report; Sugimoto K collected the patient's clinical data; Sato A, Saito K, Abe K, Nagao T, Sukeda A, and Yunaiyama D analyzed the data and wrote the paper; All authors have read and approved the final manuscript.

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

**Conflict-of-interest statement:** All the authors report no relevant conflicts of interest for this article.

**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:** Japan

**ORCID number:** Akio Sato 0000-0001-5134-0476; Kazuhiro Saito 0000-0001-5854-2070; Koichiro Abe 0000-0003-0549-9122; Katsutoshi Sugimoto 0000-0001-6271-7806; Toshitaka Nagao 0000-0003-2075-9738; Aoi Sukeda 0000-0002-7161-9404; Daisuke Yunaiyama 0000-0001-6576-5029.

**S-Editor:** Li L

**L-Editor:** Webster JR

**P-Editor:** Li L

---

## REFERENCES

- 1 **Temizoz O,** Genchellac H, Demir MK, Unlu E, Ozdemir H. Bilateral extra-adrenal perirenal myelolipomas: CT features. *Br J Radiol* 2010; **83**: e198-e199 [PMID: 20846975 DOI: 10.1259/bjr/28801968]
- 2 **Xu SY,** Xie HY, Zhou L, Zheng SS, Wang WL. Synchronous occurrence of a hepatic myelolipoma and two hepatocellular carcinomas. *World J Gastroenterol* 2016; **22**: 9654-9660 [PMID: 27920487 DOI: 10.3748/wjg.v22.i43.9654]

- 3 **Kaurich JD**, Coombs RJ, Zeiss J. Myelolipoma of the liver: CT features. *J Comput Assist Tomogr* 1988; **12**: 660-661 [PMID: 3292607 DOI: 10.1097/00004728-198807000-00028]
- 4 **Xin H**, Li H, Yu H, Zhang J, Peng W, Peng D. MR imaging to detect myelolipomas of the liver: A case report and literature review. *Medicine (Baltimore)* 2019; **98**: e16497 [PMID: 31335715 DOI: 10.1097/MD.00000000000016497]
- 5 **Yamamoto T**, Koizumi M, Kohno A, Numao N, Inamura K. A case report on 111In chloride bone marrow scintigraphy in management of adrenal myelolipoma. *Medicine (Baltimore)* 2019; **98**: e14625 [PMID: 30813194 DOI: 10.1097/MD.00000000000014625]
- 6 **Li KY**, Wei AL, Li A. Primary hepatic myelolipoma: A case report and review of the literature. *World J Clin Cases* 2020; **8**: 4615-4623 [PMID: 33083426 DOI: 10.12998/wjcc.v8.i19.4615]
- 7 **Lilien DL**, Berger HG, Anderson DP, Bennett LR. 111 In-chloride: a new agent for bone marrow imaging. *J Nucl Med* 1973; **14**: 184-186 [PMID: 4685418]
- 8 **Gilbert EH**, Earle JD, Goris ML, Kaplan HS, Kriss JP. The accuracy of 111InCl<sub>3</sub> as a bone marrow scanning agent. *Radiology* 1976; **119**: 167-168 [PMID: 1257437 DOI: 10.1148/119.1.167]
- 9 **Imai Y**, Murakami T, Yoshida S, Nishikawa M, Ohsawa M, Tokunaga K, Murata M, Shibata K, Zushi S, Kurokawa M, Yonezawa T, Kawata S, Takamura M, Nagano H, Sakon M, Monden M, Wakasa K, Nakamura H. Superparamagnetic iron oxide-enhanced magnetic resonance images of hepatocellular carcinoma: correlation with histological grading. *Hepatology* 2000; **32**: 205-212 [PMID: 10915725 DOI: 10.1053/jhep.2000.9113]
- 10 **Tanaka M**, Nakashima O, Wada Y, Kage M, Kojiro M. Pathomorphological study of Kupffer cells in hepatocellular carcinoma and hyperplastic nodular lesions in the liver. *Hepatology* 1996; **24**: 807-812 [PMID: 8855180 DOI: 10.1053/jhep.1996.v24.pm0008855180]



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>

