

World Journal of *Clinical Cases*

World J Clin Cases 2022 June 16; 10(17): 5518-5933



MINIREVIEWS

- 5518 Occult hepatitis B – the result of the host immune response interaction with different genomic expressions of the virus
Gherlan GS
- 5531 Pulmonary complications of portal hypertension: The overlooked decompensation
Craciun R, Mocan T, Procopet B, Nemes A, Tefas C, Sparchez M, Mocan LP, Sparchez Z
- 5541 Ethical review of off-label drugs during the COVID-19 pandemic
Li QY, Lv Y, An ZY, Dai NN, Hong X, Zhang Y, Liang LJ

ORIGINAL ARTICLE**Case Control Study**

- 5551 Gut peptide changes in patients with obstructive jaundice undergoing biliary drainage: A prospective case control study
Pavić T, Pelajić S, Blažević N, Kralj D, Milošević M, Mikolasevic I, Lerotic I, Hrabar D

Retrospective Cohort Study

- 5566 Longitudinal assessment of liver stiffness by transient elastography for chronic hepatitis C patients
Mezina A, Krishnan A, Woreta TA, Rubenstein KB, Watson E, Chen PH, Rodriguez-Watson C

Retrospective Study

- 5577 Clinical evaluation of prone position ventilation in the treatment of acute respiratory distress syndrome induced by sepsis
Xia WH, Yang CL, Chen Z, Ouyang CH, Ouyang GQ, Li QG
- 5586 Three-dimensional arterial spin labeling and diffusion kurtosis imaging in evaluating perfusion and infarct area size in acute cerebral ischemia
Jiang YY, Zhong ZL, Zuo M
- 5595 Intrathecal methotrexate in combination with systemic chemotherapy in glioblastoma patients with leptomeningeal dissemination: A retrospective analysis
Kang X, Chen F, Yang SB, Wang YL, Qian ZH, Li Y, Lin H, Li P, Peng YC, Wang XM, Li WB
- 5606 Hepatic epithelioid hemangioendothelioma: Clinical characteristics, diagnosis, treatment, and prognosis
Zhao M, Yin F
- 5620 Difference between type 2 gastroesophageal varices and isolated fundic varices in clinical profiles and portosystemic collaterals
Song YH, Xiang HY, Si KK, Wang ZH, Zhang Y, Liu C, Xu KS, Li X

- 5634** Assessment of incidental focal colorectal uptake by analysis of fluorine-18 fluorodeoxyglucose positron emission tomography parameters

Lee H, Hwang KH, Kwon KA

Observational Study

- 5646** "Zero ischemia" laparoscopic partial nephrectomy by high-power GreenLight laser enucleation for renal carcinoma: A single-center experience

Zhang XM, Xu JD, Lv JM, Pan XW, Cao JW, Chu J, Cui XG

- 5655** High Eckardt score and previous treatment were associated with poor postperoral endoscopic myotomy pain control: A retrospective study

Chen WN, Xu YL, Zhang XG

- 5667** Higher volume growth rate is associated with development of worrisome features in patients with branch duct-intraductal papillary mucinous neoplasms

Innocenti T, Danti G, Lynch EN, Dragoni G, Gottin M, Fedeli F, Palatresi D, Biagini MR, Milani S, Miele V, Galli A

Prospective Study

- 5680** Application of a new anatomic hook-rod-pedicle screw system in young patients with lumbar spondylolysis: A pilot study

Li DM, Li YC, Jiang W, Peng BG

META-ANALYSIS

- 5690** Systematic review of Yougui pills combined with levothyroxine sodium in the treatment of hypothyroidism

Liu XP, Zhou YN, Tan CE

CASE REPORT

- 5702** Allogeneic stem cell transplantation-A curative treatment for paroxysmal nocturnal hemoglobinuria with PIGT mutation: A case report

Schenone L, Notarantonio AB, Latger-Cannard V, Fremaux-Bacchi V, De Carvalho-Bittencourt M, Rubio MT, Muller M, D'Aveni M

- 5708** Gray zone lymphoma effectively treated with cyclophosphamide, doxorubicin, vincristine, prednisolone, and rituximab chemotherapy: A case report

Hojo N, Nagasaki M, Mihara Y

- 5717** Diagnosis of spontaneous isolated superior mesenteric artery dissection with ultrasound: A case report

Zhang Y, Zhou JY, Liu J, Bai C

- 5723** Adrenocorticotrophic hormone-secreting pancreatic neuroendocrine carcinoma with multiple organ infections and widespread thrombosis: A case report

Yoshihara A, Nishihama K, Inoue C, Okano Y, Eguchi K, Tanaka S, Maki K, Fridman D'Alessandro V, Takeshita A, Yasuma T, Uemura M, Suzuki T, Gabazza EC, Yano Y

- 5732** Management of the palato-radicular groove with a periodontal regenerative procedure and prosthodontic treatment: A case report

Ling DH, Shi WP, Wang YH, Lai DP, Zhang YZ

- 5741** Combined thoracic paravertebral block and interscalene brachial plexus block for modified radical mastectomy: A case report
Hu ZT, Sun G, Wang ST, Li K
- 5748** Chondromyxoid fibroma of the cervical spine: A case report
Li C, Li S, Hu W
- 5756** Preterm neonate with a large congenital hemangioma on maxillofacial site causing thrombocytopenia and heart failure: A case report
Ren N, Jin CS, Zhao XQ, Gao WH, Gao YX, Wang Y, Zhang YF
- 5764** Simultaneous multiple primary malignancies diagnosed by endoscopic ultrasound-guided fine-needle aspiration: A case report
Yang J, Zeng Y, Zhang JW
- 5770** Neuroendocrine tumour of the descending part of the duodenum complicated with schwannoma: A case report
Zhang L, Zhang C, Feng SY, Ma PP, Zhang S, Wang QQ
- 5776** Massive hemothorax following internal jugular vein catheterization under ultrasound guidance: A case report
Kang H, Cho SY, Suk EH, Ju W, Choi JY
- 5783** Unilateral adrenal tuberculosis whose computed tomography imaging characteristics mimic a malignant tumor: A case report
Liu H, Tang TJ, An ZM, Yu YR
- 5789** Modified membrane fixation technique in a severe continuous horizontal bone defect: A case report
Wang LH, Ruan Y, Zhao WY, Chen JP, Yang F
- 5798** Surgical repair of an emergent giant hepatic aneurysm with an abdominal aortic dissection: A case report
Wen X, Yao ZY, Zhang Q, Wei W, Chen XY, Huang B
- 5805** Heterotopic ossification beneath the upper abdominal incision after radical gastrectomy: Two case reports
Zhang X, Xia PT, Ma YC, Dai Y, Wang YL
- 5810** Non-alcoholic Wernicke encephalopathy in an esophageal cancer patient receiving radiotherapy: A case report
Zhang Y, Wang L, Jiang J, Chen WY
- 5816** New approach for the treatment of vertical root fracture of teeth: A case report and review of literature
Zhong X, Yan P, Fan W
- 5825** Ultrasound-guided microwave ablation as a palliative treatment for mycosis fungoides eyelid involvement: A case report
Chen YW, Yang HZ, Zhao SS, Zhang Z, Chen ZM, Feng HH, An MH, Wang KK, Duan R, Chen BD
- 5833** Pulp revascularization on an adult mandibular right second premolar: A case report
Yang YQ, Wu BL, Zeng JK, Jiang C, Chen M

- 5841** Barrett's esophagus in a patient with bulimia nervosa: A case report
Gouda A, El-Kassas M
- 5846** Spontaneous gallbladder perforation and colon fistula in hypertriglyceridemia-related severe acute pancreatitis: A case report
Wang QP, Chen YJ, Sun MX, Dai JY, Cao J, Xu Q, Zhang GN, Zhang SY
- 5854** Beware of gastric tube in esophagectomy after gastric radiotherapy: A case report
Yurttas C, Wichmann D, Gani C, Bongers MN, Singer S, Thiel C, Koehngrainer A, Thiel K
- 5861** Transition from minimal change disease to focal segmental glomerulosclerosis related to occupational exposure: A case report
Tang L, Cai Z, Wang SX, Zhao WJ
- 5869** Lung adenocarcinoma metastasis to paranasal sinus: A case report
Li WJ, Xue HX, You JQ, Chao CJ
- 5877** Follicular lymphoma presenting like marginal zone lymphoma: A case report
Peng HY, Xiu YJ, Chen WH, Gu QL, Du X
- 5884** Primary renal small cell carcinoma: A case report
Xie K, Li XY, Liao BJ, Wu SC, Chen WM
- 5893** Gitelman syndrome: A case report
Chen SY, Jie N
- 5899** High-frame-rate contrast-enhanced ultrasound findings of liver metastasis of duodenal gastrointestinal stromal tumor: A case report and literature review
Chen JH, Huang Y
- 5910** Tumor-like disorder of the brachial plexus region in a patient with hemophilia: A case report
Guo EQ, Yang XD, Lu HR
- 5916** Response to dacomitinib in advanced non-small-cell lung cancer harboring the rare delE709_T710insD mutation: A case report
Xu F, Xia ML, Pan HY, Pan JW, Shen YH
- 5923** Loss of human epidermal receptor-2 in human epidermal receptor-2+ breast cancer after neoadjuvant treatment: A case report
Yu J, Li NL

LETTER TO THE EDITOR

- 5929** Repetitive transcranial magnetic stimulation for post-traumatic stress disorder: Lights and shadows
Concerto C, Lanza G, Fisticaro F, Pennisi M, Rodolico A, Torrisi G, Bella R, Aguglia E

ABOUT COVER

Editorial Board Member of *World Journal of Clinical Cases*, Raden Andri Primadhi, MD, PhD, Assistant Professor, Surgeon, Department of Orthopaedics and Traumatology, Universitas Padjadjaran Medical School, Hasan Sadikin Hospital, Bandung 40161, Indonesia. randri@unpad.ac.id

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: *Hua-Ge Yin*; Production Department Director: *Xiang Li*; Editorial Office Director: *Jim-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

June 16, 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>

Heterotopic ossification beneath the upper abdominal incision after radical gastrectomy: Two case reports

Xiang Zhang, Ping-Tian Xia, Yan-Chao Ma, Yong Dai, Yan-Lei Wang

Specialty type: Surgery

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): C

Grade D (Fair): 0

Grade E (Poor): 0

P-Reviewer: Oley MH, Indonesia; Sharfman Z, Israel

Received: November 24, 2021

Peer-review started: November 24, 2021

First decision: December 27, 2021

Revised: December 31, 2021

Accepted: April 3, 2022

Article in press: April 3, 2022

Published online: June 16, 2022



Xiang Zhang, Ping-Tian Xia, Department of Colorectal Surgery, Qilu Hospital of Shandong University, Jinan 250012, Shandong Province, China

Yan-Chao Ma, Department of Radiology, Qilu Hospital of Shandong University, Jinan 250012, Shandong Province, China

Yong Dai, Department of Colorectal and Anal Surgery, Qilu Hospital of Shandong University, Jinan 250012, Shandong Province, China

Yan-Lei Wang, Department of General Surgery, Qilu Hospital of Shandong University, Jinan 250012, Shandong Province, China

Corresponding author: Yan-Lei Wang, MD, PhD, Chief Doctor, Department of General Surgery, Qilu Hospital of Shandong University, No. 107 West Wenhua Road, Jinan 250012, Shandong Province, China. yanleiwang@hotmail.com

Abstract

BACKGROUND

Heterotopic ossification (HO) is a rare clinical phenomenon that refers to bone formation in nonossifying tissues.

CASE SUMMARY

This report presents two cases of HO beneath the upper abdominal median incision after radical gastrectomy. The first patient had postoperative pain below the incision area. There were no signs of anastomotic leakage, and the wound healed. Computed tomography (CT) findings 2 wk postoperatively were negative for HO, but the 6-wk CT showed HO beneath the incision. The patient refused reoperation, and after conservative therapy, the pain was gradually relieved after 2 wk. In the second case, postoperative recovery was uneventful, and HO was only detected on routine follow-up CT after 4 mo. An anti-adhesion membrane was applied beneath the peritoneum in both patients. Our findings suggest that HO beneath the abdominal incision might form at approximately 1 mo postoperatively. It may cause intractable pain; however, reoperation is usually not required.

CONCLUSION

In our cases, we suspect that HO may be related to the use of foreign materials beneath the peritoneum, which needs to be further investigated.

Key Words: Heterotopic ossification; Upper abdominal incision; Radical gastrectomy; Case report

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

Core Tip: Heterotopic ossification (HO) beneath the upper abdominal incision is a rare clinical phenomenon that refers to bone formation in nonossifying tissues. In our cases, we suspect that HO may be related to the use of foreign materials beneath the peritoneum, which needs to be further investigated.

Citation: Zhang X, Xia PT, Ma YC, Dai Y, Wang YL. Heterotopic ossification beneath the upper abdominal incision after radical gastrectomy: Two case reports. *World J Clin Cases* 2022; 10(17): 5805-5809

URL: <https://www.wjgnet.com/2307-8960/full/v10/i17/5805.htm>

DOI: <https://dx.doi.org/10.12998/wjcc.v10.i17.5805>

INTRODUCTION

Heterotopic ossification (HO) is a rare clinical phenomenon that refers to bone formation in nonossifying tissues. This is a unique phenomenon that has rarely been reported following abdominal surgery. HO of an incisional scar was first described by Askanazy in 1901 as a subset of myositis ossificans traumatica[1,2]. Since then, more than 100 cases have been reported worldwide[2-6]. These numbers are probably an underestimate of the actual incidence, because these ossifications are usually asymptomatic[3]. HO has been described as a benign postoperative complication in most studies.

CASE PRESENTATION

Chief complaints

Case 1: The first patient was a 62-year-old man, he underwent radical gastrectomy (Billroth I anastomosis) with a midline abdominal incision. Postoperatively, the patient experienced pain below the incisional area.

Case 2: A 57-year-old man also underwent distal gastrectomy (Billroth I anastomosis) due to gastric cancer with a midline abdominal incision. The patient had no other comorbidities.

History of present illness

The two patients underwent distal gastrectomy (Billroth I anastomosis) because of gastric cancer.

History of past illness

Case 1: The patient had a history of coronary stent implantation performed 3 mo ago.

Case 2: The patients had no significant past illness.

Personal and family history

The patients had no significant personal and family history.

Physical examination

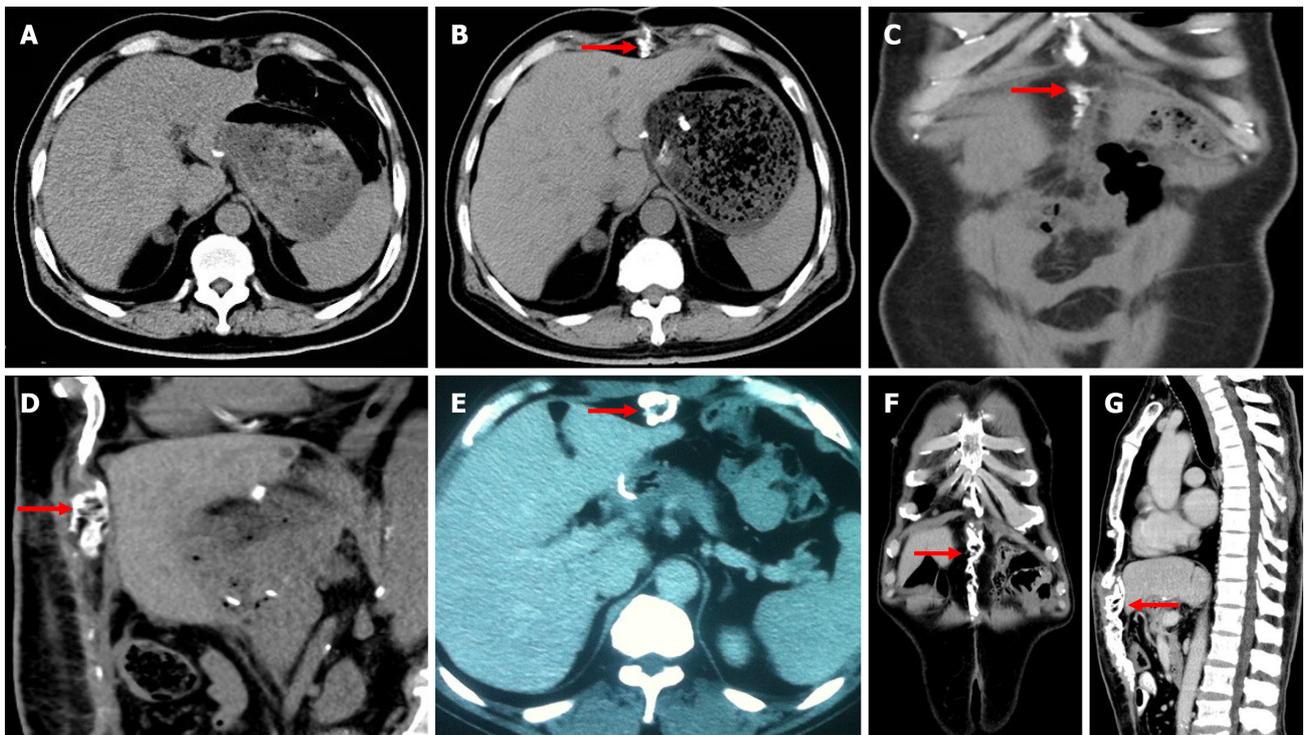
Case 1: There were no signs of anastomotic leakage, and the wound healed.

Case 2: Upon palpation, the incisional area was hard and firm.

Imaging examinations

Case 1: Computed tomography (CT) 2 wk postoperatively showed no obvious abnormality (Figure 1A), but the 6-wk CT showed calcification beneath the incision (Figure 1B-D).

Case 2: In the 4-mo follow-up CT scan, calcified tissue was noted under the upper abdominal incision, extending from the immediate subxiphoid region to the umbilical region (Figure 1E-G).



DOI: 10.12998/wjcc.v10.i17.5805 Copyright ©The Author(s) 2022.

Figure 1 Imaging examinations. A: Computed tomography (CT) scan 2 wk postoperatively in case 1 shows no obvious abnormality beneath the incision; B: CT scan 6 wk postoperatively in case 1 shows calcified tissue beneath the incision (arrow); C and D: Coronal and sagittal images of calcified tissue in case 1 between the incision and liver (arrow); E: CT scan 4 mo postoperatively in case 2 shows calcified tissue beneath the midline incision (arrow); F and G: Coronal and sagittal images in case 2 show extension of calcification (arrow).

FINAL DIAGNOSIS

The patients were diagnosed with ossification beneath the upper abdominal incision.

TREATMENT

The patient of case 1 refused reoperation, and after conservative therapy (non-steroidal anti-inflammatory drugs), the pain was gradually relieved after 2 wk.

OUTCOME AND FOLLOW-UP

At a 1-year follow-up, the patients of case 1 had no signs of recurrence.

DISCUSSION

The following common features of ectopic ossification have been summarized in documented cases: (1) Male patients are more susceptible to ectopic ossification, and the male-to-female ratio is as high as 10:1 [7]; (2) this pathology has mostly been reported in vertical scars; (3) the ectopic bone is generally formulated within the first year postoperatively; and (4) all cases in the literature occurred during primary healing, and neither wound complications nor changes in serum ion levels were noted. Both our cases fit all of these features. Moreover, the newly formed bone was detected in the first case 6 wk postoperatively, which is sooner than the earliest ectopic abdominal incision ossifications reported in the literature (2 mo)[1]. Our findings suggest that HO beneath the abdominal incision might form at approximately 1 mo postoperatively.

While no certain theory has yet been confirmed regarding etiology, several mechanisms have been studied to help explain this pathological process. Injury or, more specifically, surgical incision is considered a necessary trigger[4]. Three requisite components are involved in the pathogenesis[7]: (1) Inductive signaling pathways are activated by a stimulation factor released from the site of injury. These

factors, including bone morphogenic proteins, have been implicated as potential signaling vehicles[8]; (2) then, inducible mesenchymal stem cells, which are located at the injury site, differentiate into osteoblasts or chondroblasts after receiving these signals. This process has been described as osteogenic induction[1,4]; and (3) a heterotopic environment conducive to osteogenesis must exist. HO of the abdominal wall is a subtype of myositis ossificans traumatica. Pieces of the periosteum or perichondrium of the xiphisternum or symphysis pubis may “plant” into the incision wound during the operation and then grow into bone in the scar[1,4]. During laparotomy, we extended the incision to the xiphisternum in both cases, which can be regarded as proof of this theory to some extent.

Tam *et al*[9] recently reported a case of HO in a patient after hernia repair. In the ectopically formed bone, they found an acellular dermal matrix that had been placed in the primary incision. In our case, we placed a sodium hyaluronate-based bioresorbable membrane (Septrafil) under the peritoneum of each patient to prevent adhesion. It has been postulated that this type of anti-adhesion agent can cause inflammatory reactions as a severe postoperative complication[10-12]. Whether Septrafil was the culprit in our case needs to be further investigated.

The main symptoms of HO include local pain and swelling[7]. In suspicious cases, CT or magnetic resonance imaging should be performed for diagnosis[2]. It is also important to exclude other postoperative complications, such as anastomotic leakage and tumor recurrence. In patients with intractable abdominal pain, conservative therapy, such as analgesic administration, parenteral transfusion, and physical therapy, should be initially performed. If conservative therapy fails, then complete excision of the lesion should be considered. Asymptomatic patients need no treatment apart from observation. The first patient in our experience had sustained abdominal pain postoperatively and was readmitted to the hospital twice. After 1 mo of conservative therapy, pain was immediately relieved before surgery was considered.

CONCLUSION

Non-steroidal anti-inflammatory drug therapy, radiotherapy, and diphosphate (ethidronate disodium) administration have been proposed to decrease heterotopic bone formation[1]. However, the routine application of these methods is controversial and unnecessary.

FOOTNOTES

Author contributions: Zhang X, Dai Y and Wang YL were the patients’ surgeons, reviewed the literature and drafted the manuscript; Xia PT and Ma YC contributed to the manuscript drafting; Ma YC created figures and interpreted the imaging findings; all authors approved the final version of the manuscript.

Supported by the Clinical and Practical New Technology Development Fund of Qilu Hospital of Shandong University.

Informed consent statement: Informed written consent was obtained from the patients for the 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: Xiang Zhang 0000-0001-7417-6082; Ping-Tian Xia 0000-0001-8032-8871; Yan-Chao Ma 0000-0002-9157-4063; Yong Dai 0000-0001-6163-8022; Yan-Lei Wang 0000-0002-4227-0274.

S-Editor: Chen YL

L-Editor: A

P-Editor: Chen YL

REFERENCES

- 1 **Reardon MJ**, Tillou A, Mody DR, Reardon PR. Heterotopic calcification in abdominal wounds. *Am J Surg* 1997; **173**: 145-147 [PMID: 9074383 DOI: 10.1016/S0002-9610(96)00415-1]
- 2 **Jacobs JE**, Birnbaum BA, Siegelman ES. Heterotopic ossification of midline abdominal incisions: CT and MR imaging findings. *AJR Am J Roentgenol* 1996; **166**: 579-584 [PMID: 8623631 DOI: 10.2214/ajr.166.3.8623631]
- 3 **Fennema EM**, de Boer J, Mastboom WJ. Ossification of abdominal scar tissue: a case series with a translational review on its development. *Hernia* 2014; **18**: 825-830 [PMID: 24668529 DOI: 10.1007/s10029-014-1240-x]
- 4 **Hogan NM**, Caffrey E, Curran S, Sheehan M, Joyce MR. Heterotopic ossification of the abdominal wall. *Int J Surg Case Rep* 2012; **3**: 489-491 [PMID: 22858788 DOI: 10.1016/j.ijscr.2012.06.004]
- 5 **Ma JP**, Xian MF, Liao B, Hong GX, He YL, Zhan WH. Postoperative heterotopic mesenteric and incision ossification. *Chin Med J (Engl)* 2013; **126**: 3799-3780 [PMID: 24112190]
- 6 **Lai HJ**, Jao SW, Lee TY, Ou JJ, Kang JC. Heterotopic mesenteric ossification after total colectomy for bleeding diverticulosis of the colon--a rare case report. *J Formos Med Assoc* 2007; **106**: S32-S36 [PMID: 17493894 DOI: 10.1016/s0929-6646(09)60350-8]
- 7 **Kaplan FS**, Glaser DL, Hebela N, Shore EM. Heterotopic ossification. *J Am Acad Orthop Surg* 2004; **12**: 116-125 [PMID: 15089085 DOI: 10.5435/00124635-200403000-00007]
- 8 **McCarthy EF**, Sundaram M. Heterotopic ossification: a review. *Skeletal Radiol* 2005; **34**: 609-619 [PMID: 16132978 DOI: 10.1007/s00256-005-0958-z]
- 9 **Tam V**, Zelken J, Sacks JM. Total heterotopic ossification of an acellular dermal matrix used for abdominal wall reconstruction. *BMJ Case Rep* 2013; **2013** [PMID: 24121808 DOI: 10.1136/bcr-2013-009081]
- 10 **Klingler PJ**, Floch NR, Seelig MH, Branton SA, Wolfe JT, Metzger PP. Septrafilm-induced peritoneal inflammation: a previously unknown complication. Report of a case. *Dis Colon Rectum* 1999; **42**: 1639-1643 [PMID: 10613487 DOI: 10.1007/BF02236221]
- 11 **Remzi FH**, Oncel M, Church JM, Senagore AJ, Delaney CP, Fazio VW. An unusual complication after hyaluronate-based bioresorbable membrane (Septrafilm) application. *Am Surg* 2003; **69**: 356-357 [PMID: 12716099]
- 12 **Huang JC**, Yeh CC, Hsieh CH. Laparoscopic management for Septrafilm-induced sterile peritonitis with paralytic ileus: report of 2 cases. *J Minim Invasive Gynecol* 2012; **19**: 663-666 [PMID: 22935311 DOI: 10.1016/j.jmig.2012.04.006]



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>

