CASE REPORT – OPEN ACCESS

International Journal of Surgery Case Reports 37 (2017) 261–264

Contents lists available at ScienceDirect

International Journal of Surgery Case Reports

journal homepage: www.casereports.com

A case of multiple inflammatory hepatic pseudotumor protruding from the liver surface after colonic cancer

Toshikatsu Nitta[a,b,c,*], Jun Kataoka[a,b,c], Yoshihiro Inoue[a,b,c], Kensuke Fujii[a,b,c], Masahito Ohta[a,b,c], Hiroshi Kawasaki[a,b,c], Atsushi Takeshita[a,b,c], Takashi Ishibashi[a,b,c]

[a] Division of Surgery Gastroenterological Center, Medico Shunju Shiroyama Hospital, Osaka, Japan
[b] Division of Surgery Osaka Medical college, Osaka, Japan
[c] Division of Pathology Osaka Medical college, Osaka, Japan

ARTICLE INFO

Article history:
Received 27 April 2017
Received in revised form 26 May 2017
Accepted 27 May 2017
Available online 8 June 2017

Keywords:
Inflammatory pseudotumor
Inflammatory hepatic pseudotumor
Metastatic liver tumor
Liver surface

ABSTRACT

INTRODUCTION: Inflammatory hepatic pseudotumor (IHPT) is an important benign liver disease because it is difficult to clinically and radiologically distinguish from malignant tumors.
PRESENTATION OF CASE: Here, we describe **a case** of a 67-year-old male patient diagnosed with multiple inflammatory hepatic pseudotumors. The patient had undergone left hemicolectomy for descending colonic cancer (T3 N0 M0 stage IIA) 2 years prior. He underwent segment 6 and segment 7 partial hepatectomy because of suspected liver metastasis. The patient had an unremarkable postoperative course and was discharged 7 days after surgery. Marked infiltration of inflammatory cells was observed on histological examination. The patient was finally diagnosed with IHPT of the fibrohistiocytic type.
DISCUSSION: Repeated imaging studies over 1 month showed the spontaneous regression of the hepatic tumors. Therefore, knowledge regarding this condition is necessary to allow for treatment, even in the absence of experience. During examination, it may be important to ascertain lesion size. Moreover, percutaneous needle biopsy and follow-up examinations are necessary for cases of suspected IHPT.
CONCLUSION: Hepatectomy should be considered if the lesion is suspected to be an IHPT.

1. Introduction

An inflammatory hepatic pseudotumor (IHPT) is a rare benign lesion whose etiology is unclear. IHPT may mimic malignant tumors when found in a patient with a history of malignancy. Some cases of IHPT have been associated with malignant tumors. We, herein, report a case of resected multiple IHPT incorrectly diagnosed as metastatic liver tumors, occurring after colonic cancer. Our case report was based on the SCARE Guidelines [1].

2. Presentation of case

The patient was a 67-year-old man who had undergone left hemicolectomy for descending colonic cancer (T3 N0 M0 stage IIA) 2 years prior to presentation. He underwent adjuvant chemotherapy with oral uracil and tegafur plus leucovorin for 6 months. One year after the hemicolectomy, the patient was found to have cholecystolithiasis and required cholecystectomy. He was otherwise clinically well without obvious tumor (colonic cancer) recurrence.

Blood chemistry analysis determined the levels of hepatobiliary enzymes.

The laboratory findings on admission were as follows: **a**spartate aminotransferase 34 U/L, alanine aminotransferase 29 U/L, alkaline phosphatase ALP 392 U/L, and γ-glutamyltransferase 37 U/L. However, the carcinoembryonic antigen level was marginally elevated (7.0 ng/mL) (Table 1). Sonazoid-enhanced ultrasonography showed that the tumors were hypoechoic at the post-vascular phase and were detected at the Kupffer phase. Computed tomography (CT) revealed two irregular peripherally enhanced S6 tumors protruding from the liver surface (Fig. 1a and b). Moreover, the tumors appeared to be growing extrahepatically. Magnetic resonance imaging (MRI) could not be performed because the patient had a tattoo. Fluorodeoxyglucose positron emission tomography (PET-CT) confirmed abnormal metabolic activity in the S6 lesion, with a high standardized uptake value of 4.27 (Fig. 2). Percutaneous needle biopsy under ultrasonic guidance was not attempted owing to a risk of tumor cell dissemination.

This patient was admitted to the Division of Surgery of the Gastroenterological Center in our hospital and underwent S6 partial hepatectomy because of suspected malignancy. He had an unremarkable postoperative course and was discharged in remission from our hospital 7 days after surgery.

Abbreviations: IHPT, inflammatory hepatic pseudotumor.

* Correspondence to: 2-8-1 Habikino, Habikino-city, Osaka, 583-0872, Japan.
E-mail address: nitta@shiroyama-hsp.or.jp (T. Nitta).

http://dx.doi.org/10.1016/j.ijscr.2017.05.037

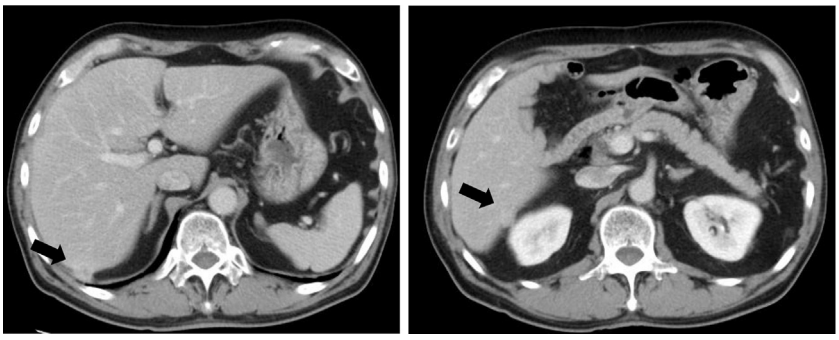

Fig. 1. a and b. Preoperative abdominal CT findings. Abdominal CT revealed two irregular peripherally enhanced S6 tumors protruding from the liver surface (black arrow). CT, computed tomography.

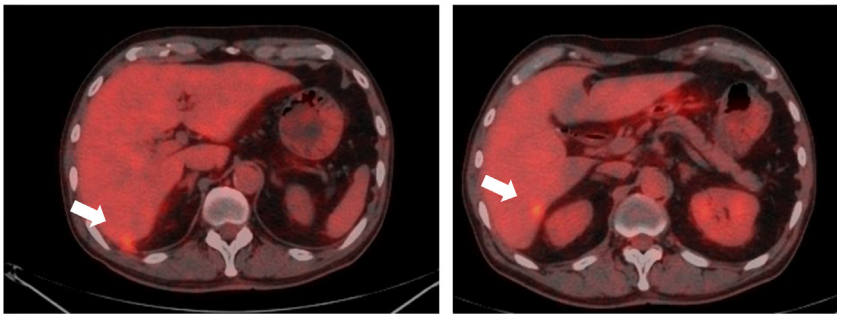

Fig. 2. Preoperative PET-CT. Fluorodeoxyglucose positron emission tomography confirmed abnormal metabolic activity in the S6 lesion, with a high standardized uptake value of 4.27 (white arrow). PET-CT, fluorodeoxyglucose positron emission tomography.

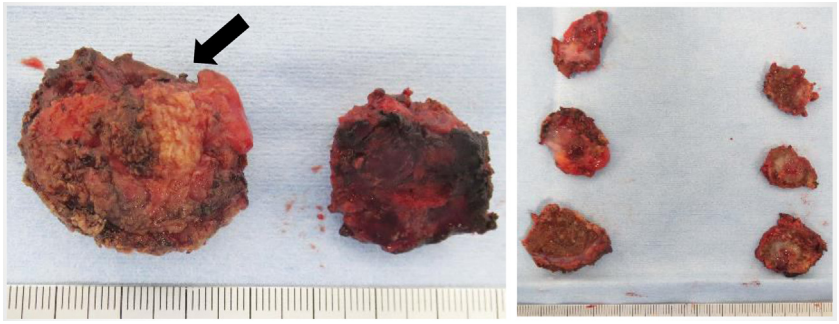

Fig. 3. Macroscopic findings of the resected specimen. The resected specimen showed that the tumor was located in the S6 area of the liver. The cut surface was yellowish and the white tumor measured 15 mm × 13 mm in diameter (black arrow).

The resected specimen showed that the tumor was located in the segment 6 area of the liver. The cut surface was yellowish and the white tumor measured 15 mm × 13 mm (Fig. 3). Histological examination of the tumor did not reveal any malignant cells. However, a remarkable infiltration of inflammatory cells was observed (Fig. 4).

The patient was finally diagnosed with IHPT of the fibrohistiocytic type. The patient was managed with adjuvant chemotherapy for 6 months, and to date, no recurrence or metastasis has been noted after 4 years.

3. Discussion

Inflammatory pseudotumors are benign lesions mostly occurring in the lungs [2] and are also referred to as inflammatory myoblastic tumors. They are characterized by localized fibrous proliferations with chronic inflammatory cell infiltration. Histologically, inflammatory pseudotumors are characterized by bland spindle cells and numerous inflammatory cells with a background of collagenous, hyalinized, or myxoid stroma [3]. The liver is the second most common organ for inflammatory pseudotumors. However, the pathogenesis of IHPT remains largely unknown [4].

IHPT is also called inflammatory myofibroblastic tumor or plasma cell granuloma and was first described in 1953 by Pack and Becker [5]. Abdominal pain, intermittent fever, jaundice, and weight loss are the main symptoms observed in IHPT patients [6]. IHPT typically presents with non-specific constitutional symptoms such as fever (66%), abdominal pain (51%), and weight loss (21%) [7,8]. However, in this case, physical examination demonstrated no symptoms such as abdominal pain.

According to Kose [9] and Lopez et al. [10], IHPT is three times more common in men than in women and is frequently seen in the non-European population. Sixty-one percent of lesions are located in the right hepatic lobe, near the gallbladder, or related to the biliary tree. Yoon et al. [11] reported that IHPT might result from cholangitis because of the degeneration and necrosis of the bile duct wall with subsequent periductal abscess caused by cholangitis and calculi-associated bile stasis.