

Obstructive Jaundice Caused by Hepatocellular Carcinoma with Bile Duct Tumor Thrombi: A Case Report

Hepatoma Parçalarına Bağlı Gelişen Tıkanma Sarılığı: Olgu Sunumu

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Abstract

Hepatocellular carcinoma (HCC) is a common malignancy and cause of death in the developing world. In this report, a case of obstructive jaundice caused by hepatocellular carcinoma with bile duct tumor thrombi is presented.

Keywords: Obstructive jaundice, Hepatocellular carcinoma, Bile duct tumor

Özet

Hepatoselüler karsinom, gelişen dünyada sık görülen bir malignensi ve ölüm nedenidir. Bu yazıda, hepatoma parçalarına bağlı gelişen tıkanma sarılıklı bir olgu sunuldu.

Anahtar Kelimeler: Tıkanma sarılığı, Hepatosellüler Kanser, Safra yolu tümörü

Introduction

Hepatocellular carcinoma (HCC) is a common malignancy and cause of death in the developing world. HCC is more prevalent in men than women, and it presents on average in the sixth and seventh decades of life [1,2].

Jaundice is present in 19-40% of patients with HCC at the time of diagnosis and usually occurs in the advanced stages of the disease. It is caused by diffuse tumor infiltration of the liver parenchyma, progressive liver failure, hepatic hilar invasion, severe cirrhosis or a combination of these factors. Obstructive jaundice due to blockage of the bile duct blockage is uncommon in HCC, as only 1-12% of patients present with this symptom. The prognosis of patients with jaundice is gloomy at best [1,2].

Case Report

A 52-year-old female was admitted to our hospital in May of 2005 with jaundice, abdominal discomfort, itchiness, bloating and nausea following meals. Her symptoms had been progressing and included a 12 kg weight loss within of the past 45 days. The patient denied previous use of alcohol or tobacco and had no history of drug use or blood transfusion.

Physical examination revealed an icteric female with normal vital signs and evidence of ascites. Her liver was palpable under the right costal margin.

Upon admission, her serum total bilirubin was found to be elevated to 29.2 mg/dl. Additional laboratory studies upon admission revealed the following results: an elevated amylase to 415 U/ml, lipase 722 U/ml, alkaline phosphatase 853 mg/dl, AST 425 mg/dl and direct bilirubin 18.8 mg/dl. Serum tests for the Hepatitis B surface antigen and antibody as well as hepatitis C virus antibody were negative. Ultrasonography revealed dilatation of the intrahepatic bile duct and the choledochal duct, as well as



Fig. 1 — Endoscopic retrograde cholangiography of the patient.



Fig. 2 — Computed tomography of the patient.

a mass measuring 27x42 mm in the distal part of the bile duct. Endoscopic retrograde cholangiography (ERC) showed a round mass measuring 27x40 mm that appeared similar to a brown bile stone in the inferior bile duct (Figure 1). These findings were reported as choledocholithiasis. To alleviate the hyperbilirubinemia caused by the obstruction, a nasobiliary stent was placed. As a result, the total bilirubin level regressed to 12.7 mg/dl within a week. During this period, contrast enhanced computed tomography (CT) was performed, which revealed a tumor infiltrating both lobes of the liver as well as the portal vein (Figure 2).

The patient underwent surgery in June of 2005. Intraoperative examination showed that both lobes of the liver were transformed almost completely into the tumor mass. The common bile duct (CBD) was found to be dilated. Upon opening of the CBD, pieces of tumor were found inside CBD and removed. We deemed the tumor to be unresectable. After cleaning out the tumor remnants from within the common bile duct, we placed a T-tube into the common bile duct and then took out the nasobiliary stent.

Histopathologic examination of both the pieces of tumor extracted from the CBD and the liver biopsy samples revealed cancer cells. The characteristics of these cells supported a diagnosis of well-differentiated HCC.

The patient developed ARDS on the second postoperative day and was taken to the intensive care unit. She was followed in the ICU for six days. On the seventh postoperative day, the patient was lost due to hepatic and cardiopulmonary insufficiency.

Discussion

Most patients with HCC present with advanced disease. Typically, they complain of right upper quadrant pain and weight loss, which causes them to seek medical attention [1, 2].

Jaundice is caused by diffuse tumor infiltration of the liver parenchyma, progressive liver failure, hepatic hilar invasion, severe cirrhosis or a combination of these factors [1-3]. Obstructive jaundice, however, is an uncommon cause of jaundice in HCC patients. The presence of jaundice, regardless of cause, is not a contraindication for surgery. Obtaining a definite diagnosis of HCC prior to surgery is often challenging, as imaging techniques cannot always distinguish between HCC and choledocholithiasis or cholangiocarcinoma [4,5].

The ideal therapy for HCC patients with jaundice, if possible, is surgical resection. Patients with primary liver cancer and obstructive jaundice due to migrated tumor fragments in the bile

duct may also benefit from surgical resection [6]. A bilioenteric anastomosis or T-tube can be used to alleviate jaundice if the tumor mass is unresectable [7]. In this reported patient, the decision to operate was made based on the potential to clear the obstruction of the CBD, allowing bile to drain from the liver and preventing early hepatic insufficiency, which would inevitably shorten patient survival.

The prognosis of this advanced type of HCC is generally dismal, but it is better than the prognosis of HCC patients who have jaundice caused by hepatic insufficiency [6-8].

Conflict interest statement The authors declare that they have no conflict of interest to the publication of this article.

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