Jaundice After Radical Cholecystectomy and Bile Duct Resection: A Case of Postoperative Acute Viral Hepatitis A Confounding the Clinical Picture

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Introduction

Gallbladder cancer is a common cancer in the northern part of India [1]. Radical cholecystectomy is the only curative option for patients with resectable disease. Resection of the common bile duct may be required if the tumor/lymph node is seen to involve the CBD or if the cystic duct margin is positive [2]. Postoperative jaundice in the setting of radical cholecystectomy with CBD resection usually points to stricture of the hepaticojejunostomy or recurrence of the cancer. We report a patient who had postoperative jaundice caused by viral hepatitis after having undergone radical cholecystectomy with CBD resection.

Case Report

A 60-year old lady was evaluated for upper abdominal pain and was diagnosed to have a gallbladder mass. CT scan revealed a mass in gallbladder invading the liver; there were no significant portal lymph nodes. The liver function test was within normal limits. After careful preparation and counseling, she was prepared for surgery. On laparotomy, there was a mass in the body and neck of the gallbladder with a mild invasion of the liver parenchyma. There were no significant regional lymph nodes, and there were no liver or peritoneal metastases. She underwent radical cholecystectomy, which involved resection of the wedge of liver and regional lymphadenectomy. The cystic duct margin was

seen to be grossly involved, and hence the common bile duct was also resected till the hilum. This was followed by Roux-en-Y hepaticojejunostomy.

The postoperative course of the patient was uneventful and she was discharged on the 6th day following surgery. The histopathology report confirmed the diagnosis of adenocarcinoma of the gallbladder involving the liver parenchyma superficially. The liver margins were free, and all the 9 lymph nodes assessed were free of metastasis. The cystic duct cut margin was involved but the resected CBD did not show any tumor.

The patient came back after a month of surgery with jaundice, immediately arousing the suspicion of anastomotic stricture of the hepaticojejunostomy. However, the liver function test showed grossly elevated serum transaminases (SGOT 1430 units/ml, SGPT 1655 units/ml) with a mild elevation of serum alkaline phosphatase (350 units/ml). On further enquiry, she also revealed that she had transient fever 10 days after discharge, which she had ignored. She did not remember having had uncooked food outside prior to surgery. She also had no blood transfusion during or after surgery. Viral markers were promptly asked for, and she was found to have elevated levels of IgM antibody against hepatitis A virus. HBsAg and anti-HCV Ab were found to be negative.

She was managed conservatively, and she improved symptomatically in a few days. Biochemical disappearance of jaundice took about 2 weeks. Two years following surgery, she is asymptomatic and disease-free.

Discussion

One of the controversies in surgery for gallbladder cancer is the role of bile duct resection [3, 4]. While the author does

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not perform bile duct resection routinely in patients with operable gallbladder cancer, there are circumstances that warrant bile duct resection [2]. This patient had cystic duct margin showing gross tumor and hence resection of bile duct with Roux-en-Y hepaticojejunostomy was a logical choice.

Postoperative jaundice following surgery that involves hepaticojejunostomy usually points towards anastomotic stricture of the hepaticojejunostomy [5]. In the context of gallbladder cancer, another reason of postoperative jaundice may be recurrence of the disease. Anastomotic stricture is often related to ischemia at the site of anastomosis or may be a sequel if there was an anastomotic leak. Our patient had no leak and the drain had been removed on the fifth postoperative day. The histopathology report showed a T3N0 disease on account of liver invasion and no lymph nodal involvement. Although the cystic duct margin was positive for cancer, the revised margin was negative as the resected bile duct did not show any tumor.

The patient developed jaundice 1 month following surgery. While suspecting one of the two causes mentioned above (anastomotic stricture or recurrence), she was investigated with liver function test and an ultrasound of the abdomen. The results of these investigations pointed towards acute viral hepatitis. Viral markers were ordered and the results revealed infection with hepatitis A virus. She recovered completely on conservative management.

This report is an example of acute viral hepatitis confounding the postoperative picture. On retrospect, several things fall in place. The temporal sequence of fever followed by jaundice is classic of viral hepatitis [6], but in postoperative situation a

transient fever is often considered to be due to some other infection. The timing of jaundice in this patient correlates well with the latent period of acute viral hepatitis [6], although the anastomotic stricture and recurrence may cause jaundice at the same time.

In conclusion, appearance of postoperative jaundice in a patient who has undergone radical cholecystectomy with bile duct resection for gallbladder cancer need not always be related to anastomotic stricture or recurrence of the disease. Other medical causes of jaundice should also be considered in the differential diagnosis.

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