Inflammatory Stenosis of the Main Bile Duct: A Case Report

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ABSTRACT

Inflammatory stenosis of the main bile duct is rare and not well characterized. We report a 47-year-old male, in whom obstructive jaundice was caused by inflammatory stenosis of the main bile duct. The patient was admitted due to jaundice and an abdominal ultrasound revealed intrahepatic bile duct dilatation, distended gallbladder and a mass around the main bile duct. MRI revealed the mass in the site. We diagnosed this condition as main bile duct occlusion of unknown origin and considering this as emergency situation, we performed laparotomy. Segmental resection of the main bile duct and jejunal hepatic shunt on Y-branch were performed. Although image analyses suggested a mass lesion, histology confirmed nonspecific cholangitis.

Keywords: Biliary stenosis; icterus; cholangiocarcinoma.

1. INTRODUCTION

Stenosis of the main biliary tract may be of various inflammatory, tumor, ischemic or traumatic origins [1]. The main diagnosis to be ruled out is cholangiocarcinoma, which accounts for 3% of digestive cancers and has a very poor prognosis [2]. The diagnosis of main bile duct stenosis is suggested for any cholestasis syndrome. The management of icteric patients -
with biliary tick stenosis is still complex and requires numerous tests that are not always easy to obtain within a short period of time [1]. We report the case of a patient admitted to us for a clinical cholestasis syndrome who had benefited from a segmental resection of the main bile duct with hepatic-jejunal shunt on a Y-shaped loop and the anapath confirmed the inflammatory origin of the stenosis.

2. PATIENT AND OBSERVATION

He is a 57-year-old patient with no particular pathological history. Presents a clinical cholestasis syndrome evolving for 10 days made of jaundice dark urine and discolored stools. Clinical examination finds a patient hemodynamically and respiratory stable. On abdominal examination there was a sensitivity of the right hypochondrium, without palpable mass, the pelvic touch was without particularity.

The abdominal ultrasound showed microlithiasis in the gallbladder with dilatation of the main bile duct and the intrahepatic bile ducts, a Bili Irm was performed which was objectively suggestive of a common bile duct tumor process under the lower biliary confluence with upstream retrodilatation, the tumor markers were negative with an ACE level of 3.38 ng/ml and CA19,9 : 53.90 IU/ml, the hepatic assessment was disturbed with a marked increase in conjugated bilirubin at 43mg/l, GGT: 60 IU/L and PAL: 145 IU/L.

The patient underwent a cholecystectomy with segmental resection of the main biliary tract and endometrial Y-branch hepatojejunal shunt.

On the anatomophatological examination, we noted: non-specific chronic inflammatory and fibrotic remodeling, non-specific chronic cholecystitis and the absence of signs of malignancy.

The evolution was marked by the regression of jaundice, the progressive reduction of cholestasis enzymes as well as of conjugated bilirubin.

Postoperative follow-up was simple and the patient was declared on the 7th postoperative day.

3. DISCUSSION

Although up to 30% of biliary stenosis may be benign [3] and approximately 15-24% of patients undergoing surgical resection for suspected biliary malignancy have a benign etiology [4]. The first series reporting inflammatory stenosis for studying the incidence of benign proximal bile duct disease in patients operated on for hilum cancer was published in 1985 by Hadjis et al. and reported an incidence of 8% [5]. Benign causes of biliary obstruction are often inflammatory processes such as chronic pancreatitis, primary sclerosing cholangitis, autoimmune pancreatitis and G4 immunoglobulin-related cholangitis, portal biliopathy, HIV-related cholangitis, parasitic infection or benign idiopathic focal narrowing [6]. Before deciding on therapeutic management, it is important to exclude a neoplastic origin based on a clinical and radiological rationale. Abdominal ultrasonography is often the first examination performed to detect the origin of biliary tract obstruction, but it often does not determine the nature of the obstruction. Hence the need for an abdominal CT scan, which allows the obstacle to be located more precisely and sometimes provides valuable information about the etiology [7]. Echo-endoscopy allows the bile ducts to be

Image 1. Dilation of the intrahepatic bile ducts. Circumferential stenosis by a budding process at the level of the lower bile duct with retro dilatation of the upstream bile duct
examined almost in direct contact with the bile ducts, supplemented by puncture with a fine needle, in order to allow microscopic diagnosis [8]. MRI is to be preferred, it should combine hepatic MRI sequences with injection and cholangiography sequences allowing biliary mapping which will be essential before possible catheterisation or surgery with a sensitivity for the diagnosis of the nature of the lesions which remain average with a sensitivity of between 48 and 88% and a specificity of between 71 and 95% [1]. ERCP should be considered on a case-by-case basis or the combination of cytology + biopsy which allows the most satisfactory results to be obtained with a diagnostic performance of between 54 and 70% and a specificity of 100% [1,2].

Removal of the stenotic main bile duct is the only way to make a diagnosis with surgical reconstruction which is often necessary [9] although the long-term success of endoscopic ERCP treatments is similar to that of surgery (80%) with the advantage of being non-invasive [7].

4. CONCLUSION

The management of patients with cholestasis on biliary stenosis is still complex and requires many tests that are not always easy to get in a short period of time, but new exploration techniques can help to solve the most difficult cases.

CONSENT

As per international standard or university standard, patient’s written consent has been collected and preserved by the authors.

ETHICAL APPROVAL

As per international standard or university standard written ethical approval has been collected and preserved by the authors.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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