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Management of intrahepatic lithiasis in Madagascar

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SUMMARY

Introduction

Intrahepatic lithiasis is defined by the presence of stones in the intrahepatic bile ducts. It is a rare pathology that represents about 1¨% of the cases of lithiasis in the Caucasian population against 50% in the Chinese population. In Madagascar, few cases had been recorded. The objective of our study is to discuss the management of intrahepatic lithiasis.

Observation

A 45-year-old woman had episodes of febrile hepatic colic associated with cholestatic-looking jaundice in a picture of angiocholitis. Abdominal CT scan confirmed hepatolithiasis as well as intra-cholestatic lithiasis. A biliodigestive shunt was performed. The evolution was favorable with regression of jaundice and complete healing after ten days.

Conclusion

Hepatolithiasis remains rare in the Malagasy population. Diagnosis is based on radiological images. Management is multidisciplinary in the absence of a well-established modality due to the low level of evidence.

Mots-clés : Lithiase des voies biliaires; Madagascar ; Traitement

INTRODUCTION

Intrahepatic lithiasis is defined by the presence of stones in the intrahepatic bile ducts upstream of the convergence of the right and left hepatic ducts (regardless of the presence of stones in the main bile duct and/or gallbladder) [1]. Depending on the origin, it may be secondary to retrograde migration from the main bile duct or primary (de novo stones in HBV) [2]. It is a rare pathology that represents about 1¨% of lithiasis cases in the Caucasian population, 1.7% in the Japanese population and 50% in the Chinese population [3].

In Madagascar, few cases had been recorded. The objective of our study is to discuss the management of intrahepatic lithiasis.

OBSERVATION

A 45-year-old woman had episodes of febrile hepatic colic associated with cholestatic-looking jaundice in a picture of angiocholitis. Her blood count showed a hemoglobin level of 12g/dL and a white blood cell count of 14G/L. Ultrasonography of the liver and bile ducts had objectified a shadow cone formation in the bile ducts, as well as in the intrahepatic duct. Abdominal CT scan confirmed the presence of hepatolithiasis as well as intra-choledial lithiasis. A biliodigestive bypass was performed. No biliary wounds were found. A drain had been put in place and maintained for two days. Immediately postoperatively, the patient was transferred to the ward. She had benefited from biantibiotherapy for seven days. The transit had resumed on D2 postoperatively. The postoperative rehabilitation was early. The evolution was favorable with regression of jaundice and complete healing after ten days.

DISCUSSION

Its low prevalence in Madagascar explains why it is still unknown in medical practice. The main factors identified are : Biliary stasis and bacterial or parasitic infection (Clonorchis sinensis, Ascaris lumbricoides). This stasis can be of malformative cause such as congenital dilatation (Caroli syndrome in the West) or secondary to stenosis (post-operative, primary or secondary sclerosing cholangitis, tumors...) [5]. Anatomically, the left lobe is more exposed due to the acute angle formed by the main bile duct and the left hepatic duct [5]. A genetic predisposition is also discussed in the literature with a mutation ABCB4 as well as other genes (ABCB11, ABCG5/G8, ABCC2) [2,3]. In our observation, the patient had no history of hepatolithiasis without her family history.

Abdominal ultrasonography and abdominal CT scan was one of the criteria used by our team to make the diagnosis of hepatic lithiasis associated with intra-choledial lithiasis. In the literature, the diagnosis is based on imaging. The experience

of the ultrasonographer plays an important role in the search for shadow cones or comet tails in the intrahepatic bile ducts [6,7]. To explore biliary mapping, the abdominal scanner remains an exploitable non-invasive means, as well as Cholangio-MRI with a greater sensitivity compared to direct cholangiography of 98% for stones and 97% for biliary stenosis

[6,8]. Trans-hepatic cholangiography (TCH) represents the gold standard as well as ERCP but their morbidities are significant. These two examinations are not yet feasible in Madagascar due to the lack of a technical platform.

Our patient had benefited from a biliodigestive derivation. The effectiveness of ursodeoxycholic acid (AUDC) on the symptoms before the disappearance of the stones are to be discussed. Other approaches are also suggested such as endoscopic (+/- lithotripsy), per-cutaneous (+/- lithotripsy), surgical (+/- subcutaneous jejunal loop), interventional. Cholecystectomy is not systematic [9-11].

CONCLUSION

Hepatolithiasis remains rare in the Malagasy population. Diagnosis is based on radiological images. Management is multidisciplinary in the absence of a well-established modality due to the low level of evidence.

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