Agenesis of Gallbladder as a Finding in an Exploratory Laparotomy: A Case Report

Manuel Alejandro Carbajal Vega1, Luis Bernardo Enríquez Sanchez2*, Marco Javier Carrillo Gorena3, Manuel David Pérez Ruiz1, José Guadalupe Padilla Lopez1 and David Alfonso Aguirre Baca4

1Resident Physician of General Surgery, Central State Hospital, Chihuahua, Mexico
2General Surgery Specialist, Department of General Surgery, Central State Hospital, Chihuahua, Mexico
3General Surgery Specialist, Head of the Department of General Surgery, Central State Hospital, Chihuahua, Mexico
4Medical Intern in Social Service, Autonomous University of Chihuahua, Faculty of Medicine and Biomedical Sciences, Chihuahua, Mexico

*Corresponding Author: Luis Bernardo Enríquez Sanchez, General Surgery Specialist, Department of General Surgery, Central State Hospital, Chihuahua, Mexico.

Received: January 30, 2020; Published: February 25, 2020

Abstract

Vesicular agenesis is a congenital and rare pathology, and little is known about its etiology, with an incidence of 10 to 65 cases per 100,000 inhabitants, when it is a clinical finding in surgery. In general, adults are asymptomatic, although they may have abdominal pain and/or jaundice. The authors use a case of this unusual condition, finding it a finding in a patient with a liver abscess in the exploratory laparotomy.

Keywords: Agenesis of the Gallbladder; Cholecystectomy; Magnetic Cholangiopancreatography

Introduction

Agenesis of the gallbladder is a pathology congenital and rare, first reported by Lemery in 1701 [1,8] and subsequently by Bergman 1702 [2], it has an incidence of between 10 - 65 cases per each 100,000 [1,3,11] is not the precise etiology is known but there are two theories on development, the first mentioned that the yolk diverticular liver of the intestine does not develop properly in vesícul to bile and cystic duct, I to another theory holds that, After the development of the solid phase, there is a failure in the recanalization of the cystic duct and gallbladder [5-7]. When agenesis gallbladder is diagnosed during surgery has an incidence female male 3:1 [1,3], however during autopsies prevalence equals both xos [4,9] and its age presentation is between the 36 and 46 [1,2].

It has been classified into three groups: 1) asymptomatic patient in 35% of cases, 2) accompanied by other congenital anomalies in 15% - 16% and 3) that is accompanied by symptoms in 50% [1,3]. Patients become symptomatic in 23% of cases and almost always interpreted so erroneous as cholecystitis with obstruction of the cystic duct or gallbladder sclera - atrófica, realizándosele one cholecystectomy unnecessary [1,6,7]. The mechanism by which becomes symptomatic is not known, but most researchers think that is determined by dysfunction of the esfínter Oddi and dyskinesia biliary [4,9], is estimated that between 25 and 50% of these patients develop calculi in the common bile duct [11], the classic symptoms and l 90% of cases are: abdominal pain in the right upper quadrant, nausea and vomiting in 66%, impaired fatty foods in 37%, dyspepsia 30% and jaundice in 35% [6,9,12]. It has been associated with some chromosomopathies

Agenesis of Gallbladder as a Finding in an Exploratory Laparotomy: A Case Report

such as trisomy 18 and Klippel-Feil syndrome as well as fetal anomalies such as fatal and non-fatal, for example an imperforate anus, duodenal atresia, biliary atresia, pancreatic agenesis, ventricular septal defects, intestinal malrotation, the choledochal cyst and the choledocectasia [3,13,14].

Preoperative diagnosis is extremely difficult and generally all diagnoses PATIENT tes asymptomatic performed during laparotomy Explorer or the performance of a laparoscopic cholecystectomy [1], of should be noted that is diagnosis is performed during the surgery, the surgeon must try agenesis by scanning careful of the most frequent sites of the gallbladder bile ectopic, which are: intrahepatic, hepatic, on the left or inside the leaves of the child or within the omentum of the sickle cell, ligament side retroduodenal and retropancrático [1,2,7], however, it is not recommended to convert from a laparoscopic cholecystectomy to an exploratory laparotomy since it is useless to look for the gallbladder and increases the risk of iatrogenic damage to hepatobiliary structures during dissection as well as the risk of mortality and morbidity [12]. It is suggested that during surgery if the gallbladder can not be displayed at a suitable time, it perform a Cholangio endoscopic retrograde to observe via biliary or subsequently further investigate the location of the gallbladder through cholangiopancreatography magnetic [6,9].

The cholangiopancreatography Magnetic is a mét noninvasive imaging ODO display has shown the biliary tract without the need for contrast material Locating an excluded gallbladder and/or ectopic. It should be considered its realization preoperative where the ultrasound suggests not display the gallbladder before any decision surgical [10,11,18]. For cases in which agenesis of the gallbladder is confirmed and cholelithiasis is excluded, conservative treatment with smooth muscle relaxants can be considered and if this failure is indicated biliary sphincterotomy [1,4,6,17].

Clinical Case

A 81-year-old male patient begins his current condition 2 days prior to admission, presenting an unquantified fever, and neurological impairment and presenting Glasgow 4, so he is intubated and transferred to this hospital. Upon admission, the patient is intubated, in a state of hypertensive, tachycardic septic shock, with renal failure and with the need for amines as a result of intensive care. Laboratories on admission: Leu 8.13, Neu 12.09, Hb 17.4, Hct 53.4, Plq 205, Bun 82 Cr 5.5, Glucose 1030, Ur 175, Na 126, K 3 and Cl 88. She underwent tomography of skull: no evidence of lesions, simple abdominal tomography: where the presence of hepatic air is observed, suggestive of abscess or cyst, without a hydro level in the right hepatic lobe segment VII-VII without the presence of gallbladder, not liquid or free air. Reaching the diagnosis of abscess liver so the day 4/3/2019 passes laparotomy Exploratory where little free liquid is observed inflammatory is reviewed liver without evidence of abscess, it is punctured in segment liver VI-VII end of purulent only secretion Minimal turbidity and is sent to culture, no gallbladder is evidenced so the liver is explored without finding it, then the patient continues with poor evolution and dies in intensive care.

Discussion

The gallstone is a disease very common throughout the world, but as already mentioned earlier the absence of vesicular bile is very rare [4], to the same diagnosis usually do not have in mind because sometimes PUE to present or no symptoms or be finding a surgery como in our clinical case [15], imaging studies are very important to think about the diagnosis, first of all ultrasound we can target on an absence vesicular however is a study where the outcome is variable due to the doctor who performs it and a false-positive can be interpreted which causes erroneous or unnecessary surgeries [2], with our patient during his surgery the vesicular absence was observed and as it says in the literature we search on the different sites inf recounts its location [8] however is not found, then indicated is making a cholangiopancreatography magnetic where you appreciate the biliary tree to confirm vesicular agenesis [10,16], unfortunately this study could not be performed with our patient due to its poor conditions, it should also be taken into account that it should not be converted to open surgery in case of not visualizing the gallbladder because they could injure other structures.

C hen diagnosed before surgery and the patient has symptoms treatment can be done based smooth muscle relaxants, however if no improvement has the following therapeutic option is the sphincterotomy for draining bile duct.
Agenesis of Gallbladder as a Finding in an Exploratory Laparotomy: A Case Report


**Conclusion**

Vesicular agenesis is a pathology that, although not frequent, must be present in patients in whom it is not identified during an exploratory laparotomy or laparoscopic cholecystectomy due to a misinterpreted ultrasound, in our clinical case it was a surgical finding, however unfortunately, the protocol could not be completed with a magnetic cholangiopancreatography, due to the lack of magnetic resonance in our institution as well as the hemodynamic instability and death of the patient.

**Financing**

There was no source of financing.

**Conflict of Interests**

The authors declare no conflict of interest.

**Ethical Responsibilities**

The authors have obtained the informed consent of the patients or subjects referred to in the article.

*Figure 1:* Simple abdominal tomography showing the absence of gallbladder.
Agenesis of Gallbladder as a Finding in an Exploratory Laparotomy: A Case Report

Bibliography


Agenesis of Gallbladder as a Finding in an Exploratory Laparotomy: A Case Report


Volume 7 Issue 3 March 2020
©All rights reserved by Luis Bernardo Enríquez Sanchez., et al.