

CASE REPORT: MIRIZZI SYNDROME DIAGNOSED INTRAOPERATIVELY

LEONARDO ETERNO MEDEIROS DOS SANTOS¹; ISABELLE MARTINS NÓBREGA²; HENRIQUE PATRIOTA DE LIMA¹; GUILHERME DE OLIVEIRA ARANTES¹; RHAISSA ALVARENGA DE TOLEDO²; ANDRESSA OLIVEIRA PEREIRA²

ABSTRACT

The article in question describes a clinical case of Mirizzi syndrome, a rare condition in which there is compression or obstruction of the common bile duct due to gallstones impacted in the cystic duct or gallbladder. Mirizzi syndrome is a potentially serious complication of cholelithiasis (the presence of stones in the gallbladder). However, the case report details the patient's clinical presentation, which was incredibly asymptomatic. During the surgical procedure (cholecystectomy), surgeons identified anatomical abnormalities and changes typical of Mirizzi syndrome, confirming the intraoperative diagnosis. The objective of the case report is to provide a detailed description of a specific clinical case, demonstrating the clinical presentation, diagnosis, treatment and evolution of this rare condition. Also using the Data Collection method, where the patient's clinical data were collected, including medical history, physical examinations, laboratory test results, diagnostic imaging images (such as ultrasound, computed tomography, etc.) and findings intraoperatively. Finally, in final considerations, the results were analyzed in light of the medical literature and discussed in terms of differential diagnosis, therapeutic management and specific challenges encountered during the patient's treatment.

KEYWORDS: MIRIZZI SYNDROME; INTRAOPERATIVE; SURGERY; CASE REPORT

INTRODUCTION

Mirizzi syndrome is a rare complication of cholelithiasis, characterized by compression or obstruction of the common bile duct due to impaction of gallstones in the cystic duct or gallbladder. Initially described by Pablo Mirizzi in 1948, this condition poses a diagnostic and therapeutic challenge due to its varied clinical presentation and the need for immediate surgical intervention in many cases. Mirizzi syndrome can mimic other biliary pathologies, such as acute cholecystitis, gallbladder carcinoma, and common bile duct stenosis, making preoperative diagnosis often challenging.

The typical clinical presentation includes abdominal pain, jaundice, fever, and abnormalities in liver function tests. The definitive diagnosis of Mirizzi syndrome is often established during surgery, when characteristic intraoperative findings are identified, such as adhesions between the gallbladder and the common hepatic duct, as well as impacted stones in the bile duct¹.

In this case report, we describe a patient with Mirizzi syndrome whose diagnosis was established during cholecystectomy due to the presence of intraoperative complications. This case highlights the diagnostic and therapeutic challenges associated with this condition, as well as the management strategies adopted to ensure a safe and effective surgical intervention.² By reporting this clinical case, we aim to contribute to the understanding and man-

agement of this rare condition, providing data and results that may assist in the early identification and appropriate treatment of Mirizzi syndrome.

OBJECTIVE

Report the case of a patient describing a case of cholelithiasis with a complication of Mirizzi syndrome, highlighting the clinical presentation, diagnostic findings, treatment and intraoperative findings and discussing the intraoperative considerations and challenges associated with the presence of impacted stones and fistula, as well as the strategies used to manage these complications during laparoscopic cholecystectomy.

METHOD

Patient M.R.R, a 26-year-old woman, was selected based on clinical presentation and diagnosis of cholelithiasis with a complication of Mirizzi syndrome. Data were collected from the patient's medical history, including reported symptoms, laboratory test results, imaging findings, and information about the surgical procedure.

The patient's previous exams were reviewed, including results of complete blood count, liver enzymes (GGT, AST, ALT), bilirubin, amylase, and lipase.³ The clinical case was detailed, including the patient's medical history, physical findings, results of previous exams, and intraoperative findings. The collected data were analyzed in light of rele-

1. Clínica de Anestesia, Goiânia/GO

2. Hospital ENCORE, Aparecida de Goiânia/GO

ADDRESS

LEONARDO ETERNO MEDEIROS DOS SANTOS
E-mail: leonardmed@icloud.com

vant medical literature, discussing the symptoms, diagnosis, treatment, and outcomes of the case in question.

CASE REPORT

Patient M.R.R, female, 26 years old, white, was admitted to the Hospital Estadual de Aparecida de Goiânia for elective cholecystectomy after an ultrasound diagnosis of cholelithiasis. The patient reported a 6-month history of epigastric pain, nausea and intolerance to fatty foods. She had been hospitalized 15 days before with refractory pain symptoms in the right hypochondrium, but without reports of cholestasis. On physical examination, the patient did not present jaundice, abdominal pain, distension or palpable masses⁴.

The patient's previous hospitalization exams showed leukocytosis of 13,540 with 79% segmented, GGT of 85, normal bilirubin levels, normal AST and ALT levels, and normal amylase and lipase levels. The patient underwent laparoscopic cholecystectomy, during which impacted stones were identified in the infundibulum of the gallbladder with a fistula to the main bile duct⁵.

Surgical conversion to laparotomic access was performed and intraoperative cholangiography was performed, observing erosion of the lateral wall of the main bile duct in less than a third of its circumference as a result of the impacted stone. The surgical treatment instituted was choledochoplasty with drainage of the cavity⁶.

Given the benign evolution of the case, the patient was discharged on the sixth day after the operation without bile contents externalized in the sentinel drain, which was removed. Upon post-operative return after 15 days, the patient remained asymptomatic.

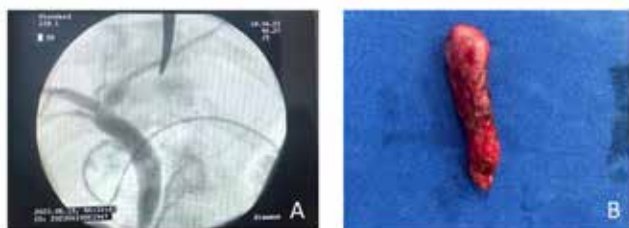


IMAGE 01 - The intraoperative images of the surgical approach show in A an intraoperative cholangiogram, demonstrating erosion of the lateral wall of the common bile duct in less than one-third of its circumference due to the impacted stone, and in B the result of cholecystectomy.

DISCUSSION

The Mirizzi syndrome can be challenging to diagnose, especially during surgery, due to its similarity to other conditions that can also cause bile duct obstruction. Discussing strategies to differentiate Mirizzi syndrome from other pathologies during surgery can be crucial for proper management. Once Mirizzi syndrome is diagnosed during surgery, the surgical approach needs to be carefully considered. This may include discussing treatment options such as removing the gallstones, gallbladder re-

section, or, in more severe cases, biliary reconstruction⁷.

Mirizzi syndrome can be associated with intra- and postoperative complications, such as bile duct injuries, infections, and bile leaks. It is important to discuss strategies for managing these complications, as well as preventing their occurrence during and after surgery. Emphasizing the importance of communication and collaboration between different specialties can be crucial to ensuring the best outcome for the patient⁸.

In conclusion, due to its uncommon occurrence in surgical practice and the potential complications associated with its management, we believe that Mirizzi syndrome should always be included in the differential diagnosis of patients with cholecystolithiasis presenting with clinical or laboratory abnormalities.

REFERENCES

1. BASTOS, A. P.; MAIA, L. M. de O. Síndrome de Mirizzi tipo V – um desafio diagnóstico e de prognóstico alarmante na colelitíase: relato de caso. *Revista de Saúde*, [S. l.], v. 10, n. 2, p. 56–60, 2019. DOI: 10.21727/rs.v10i2.1706. [Acesso em 4 fev. 2024] Disponível em: <http://editora.universidadedevasouras.edu.br/index.php/RS/article/view/1706>;
2. Nagakawa T, Ohta T, Kayahara M, Ueno K, Konishi I, Sanada H. A new classification of Mirizzi syndrome from diagnostic and therapeutic viewpoints. *Hepatogastroenterology* 1997;
3. DALTRO, Michelli; BATISTA, Alessandro; FECHTNER, Renata; LEMES, Polyana; MENEGATTI, Pedro; VENDRAMEL, Bruna; AZAMBUJA, Kamylla. Relato de caso: Síndrome de Mirizzi diagnosticada no intra-operatório. *COORTE - Revista Científica do Hospital Santa Rosa*, [S. l.], n. 08, 2018. [Acesso em: 5 fev. 2024]. Disponível em: <https://revistacoorte.com.br/index.php/coorte/article/view/106>;
4. TORREZ, S. E. P.; MOTA, I. A. C. Síndrome de Mirizzi: revisão de literatura: Mirizzi Syndrome: a review of the literature. *Brazilian Journal of Health Review*, [S. l.], v. 5, n. 4, p. 16911–16918, 2022;
5. Lacerda P.S. et al, Síndrome De Mirizzi: Um Grande Desafio Cirúrgico, *ABCD Arq Bras Cir Dig* 2014;27[3]:226-226;
6. FONSECA-NETO, Olival Cirilo Lucena da; PEDROSA, Maria das Graças Lapenda; MIRANDA, Antonio Lopes. Manejo cirúrgico da síndrome de Mirizzi. *Revista Scielo Jun* 2008. Disponível em: <https://doi.org/10.1590/S0102-67202008000200002>;
7. Reverdito, R., et al, Síndrome De Mirizzi Graus III E IV: Tratamento Cirúrgico, *Rev. Col. Bras. Cir.* 2016; 43[4]: 243-247;
8. McSherry CK, Fertenberg H, Virshup M. The Mirizzi syndrome: suggested classification and surgical therapy. *Surg Gastroenterol* 1982; 1:219-25;
9. Morelli A, Narducci F, Ciccone R. Can Mirizzi syndrome be classified into acute and chronic form? An endoscopic retrograde cholangiography (ERC) study. *Endoscopy* 1978; 10:109-12.