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PHARMACEUTICAL SCIENCES**<http://doi.org/10.5281/zenodo.1452302>Available online at: <http://www.iajps.com>**A Case Report****A CASE REPORT ON MIRIZZI SYNDROME****Shalin Elsy Varghese<sup>1</sup>, Jeethu K Shaji<sup>1</sup>, Joziya K.J<sup>1</sup>, Elizabeth Wilson Baby<sup>1</sup>,  
S. Haja Sherief<sup>2</sup> and T. Sivakumar<sup>3</sup>****1**PharmD Interns, Department Of Pharmacy Practice, Nandha College of Pharmacy, Erode,  
Tamilnadu.**2**Head of Department, Department of Pharmacy Practice, Nandha College of Pharmacy, Erode,  
Tamilnadu**3**Principal, Nandha College of Pharmacy, Erode, Tamilnadu**Abstract:**

*Mirizzi syndrome is defined as common hepatic duct obstruction caused by an extrinsic compression from an impacted stone in the cystic duct or Hartmann's pouch of the gallbladder. Mirizzi Syndrome is a rare and challenging clinical entity to manage. The most frequently used diagnostic modalities were ultrasound, computed tomography (CT), magnetic resonance cholangiopancreatography (MRCP), Endoscopic retrograde cholangio-pancreatography (ERCP). Our patient was diagnosed with calculi in gallbladder and wall appears edematous showed in USG Abdomen. According to Csend's classification, patient was found with mirizzi syndrome Type I. and We report one such case treated with laparoscopic cholecystectomy.*

**Keywords:** *Mirizzi syndrome, Gall bladder, Calculi, cholecystectomy, ERCP***\*Corresponding Author:**

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**INTRODUCTION:**

Pablo Luis Mirizzi, an Argentinian physician, in 1948 was described a condition involving a rare benign cause of obstructive jaundice that was provoked by stone impacted in either the Hartmann pouch or the cystic duct, thereby presenting obstruction of the common hepatic duct and later became known as Mirizzi syndrome. Mirizzi syndrome is a rare complication in which a gallstone becomes impacted in the cystic duct or neck of the gallbladder causing compression of the common bile duct (CBD) or common hepatic duct, resulting in obstruction and jaundice. Patients with Mirizzi syndrome can present with jaundice, fever, and right upper quadrant pain. The obstructive jaundice can be caused by direct extrinsic compression by the stone or from fibrosis caused by chronic cholecystitis (inflammation). Mirizzi syndrome was mostly occur in patients aged 53-70 years old, most of them was female (70%), although it is still possible to occur in other age groups since the gallstones was present. Mirizzi syndrome is often not recognized preoperatively in patients undergoing cholecystectomy and can lead to significant morbidity and biliary injury, particularly with laparoscopic surgery. This one is a report of such case of Mirizzi's Syndrome which was treated successfully with cholecystectomy.

**CASE REPORT:**

A 38 year old male patient with complaints of abdominal pain and vomiting, patient already has a known complaints of gangrenous gallbladder with mirizzi syndrome and patient underwent post laproscopic cholecystostomy [1,6]. Patient has no history of fever & chest pain. The laboratory blood tests showed serum bilirubin level of 0.65mg/dl, direct reacting bilirubin was 0.40mg/dl (slightly elevated). On clinical examination, USG Abdomen showed tiny calculi in gallbladder and wall appears edematous measuring upto 0.6cm. MRI Abdomen showed wall is edematous and thickened. ERCP was then performed which showed that patient has gall stones. Based on the findings, the patient was diagnosed with mirizzi syndrome and patient was advised for laparoscopic open cholecystectomy.

The patient was on antibiotics treatment (inj.cefotaxime 1.5gm) while taken for laparoscopic cholecystectomy. On table it was found that calots was frozen, gallbladder was visualized with omental adhesion around the gallbladder and adhesion were released, calots visualized then cystic artery was ligated and divided. Gall bladder released off from the liver bed then cholecystectomy done. The postoperative course was uneventful treated with Inj.cefuroxime 1.5g, Inj.metrogyl 500mg, Inj.paracetamol 100ml,

Inj.buscopan 1amp, Inj.emeset 4mg, Inj.Pan 40mg and then patient was discharged.

**DISCUSSION:**

Mirizzi syndrome is defined as common hepatic duct obstruction caused by an extrinsic compression from an impacted stone in the cystic duct or Hartmann's pouch of the gallbladder. Mirizzi syndrome is a rare and challenging clinical entity to manage. It was detected in 0.06% to 5.7% of patients during cholecystectomy and in 1.07% of patients undergoing endoscopic retrograde cholangiopancreatography (ERCP). Mirizzi syndrome is mainly treated by surgery. Mirizzi syndrome is often not recognized preoperatively in patients undergoing cholecystectomy and can lead to significant morbidity and biliary injury, particularly with laparoscopic surgery [2]

Pre-operative diagnosis is of great importance and investigations should include either ERCP or PTC in order to define anatomy. Mirizzi syndrome classified based on ERCP Findings of fistula formation. Csend's classification of mirizzi syndrome is as follows [5]

Type I - Evidence of gallstones impacting upon the Hartmann pouch or cystic duct along with slight external compression on the common bile duct (CBD).

Type II - Cholecystobiliary fistula resulting from erosion of the bile duct wall by a gallstone, the fistula must involve less than one-third of the circumference of the bile duct.

Type III - Cholecystobiliary fistula that involves up to two thirds of its circumference.

Type IV - Cholecystobiliary fistula with complete destruction of the entire wall of the common duct

According to this classification, Our patient bile duct is inflamed and no fistula is present, so patient was diagnosed with mirizzi syndrome type I and was managed with laparoscopic cholecystectomy [3,4]

**CONCLUSION:**

We conclude that, patient was diagnosed with Mirizzi syndrome Type I and was successfully treated by laparoscopic cholecystectomy [7,8] Advancement in diagnostic techniques has not made easier for a confirmed diagnosis to be made before surgery. The approach to patients with suspected Mirizzi syndrome should be cautious. Here, laparotomy is chosen as the mode of treatment for the patient and the post operative treatments also uneventful.

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