Mirizzi Syndrome: An Unusual Case of Benign Painless Jaundice

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Introduction
- Mirizzi syndrome (MS) is a rare clinical entity implicated in fewer than 1% of cholecystectomies.1,2
- The hallmark of this process is extrinsic compression of the common hepatic duct by an impacted gallstone in the gallbladder neck or cystic duct.1
- This results in obstructive jaundice and a myriad of symptoms ranging from vague abdominal pain to cholangitis.1,4
- Mirizzi syndrome can be subdivided into five different types via the Csendes classification (figure 1).5,6
  - Type I: external compression of the common bile duct
  - Types II-IV are varying severities of cholecystobiliary fistula with IV being (>50%) complete occlusion
  - Type V presents as a choledochoenteric fistula.
- MS can mimic more sinister processes such as biliary neoplasm.7

History of Present Illness
- A 57-year-old female presented to the ED with intermittent nausea, vomiting, and painless jaundice. The patient reported at least a week of symptoms during which she also noted dark urine and pale colored stools. She developed extreme pruritus all over her body, prompting her to seek care.

Vital Signs
- T: 98.8°F HR: 64 bpm BP: 132/77 mmHg

Examination:
- General: Alert, oriented, NAD
- CVS: Regular
- Pulm: Non-labored
- Abd: Soft, non-tender, non-distended, negative Murphy’s
- Skin: Icteric

Medical History
- Hypertension
- Hypothyroidism
- Obesity (BMI 37 kg/m²)

Medications
- Lisinopril/hydrochlorothiazide
- Levothyroxine

Case Description

Hospital Course

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<th>Hospital Day #1</th>
<th>Hospital Day #2</th>
<th>Hospital Day #3</th>
<th>Hospital Day #6</th>
<th>Hospital Day #8</th>
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<tbody>
<tr>
<td>Admission</td>
<td>MRCP</td>
<td>ERCP &amp; stent</td>
<td>Cholecystectomy</td>
<td>Discharge</td>
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Figure 2: Laboratory Analysis

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Figure 3: MRCP

Figure 4: ERCP

Surgical Course
- Laparoscopic cholecystectomy was achieved with great difficulty.
- The gallbladder was found to be markedly inflamed and largely intra-hepatic.
- A top-down approach was utilized to obtain the critical view of safety.
- The gallbladder was removed, however, the massive stone seen on MRCP was wedged deeply in the cystic duct.
- A distal cystic ductotomy was utilized to remove the stone and subsequently repaired primarily.
- Drains were left at the conclusion of the procedure.

Conclusion
Mirizzi syndrome is a rare gallbladder pathology that presents as obstructive jaundice secondary to extrinsic compression of the common hepatic duct. Despite its complexity, patient outcomes are typically excellent.

References