



# How many stones are too many stones?



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## Introduction

- Gallstones disease or cholelithiasis has become one of the most prevalent diseases of the developed world in the last few decades.
- Certain populations, including pregnant females, have been identified to be at increased risk.
- Gallstones can be present in 1-3% of all pregnancies and acute cholecystitis is the second cause of non-obstetric indication for surgery in pregnancy.
- In pregnancy, there is an influx of estrogen, which increases cholesterol secretion.
- By the other side, increased progesterone levels reduce bile secretion and delay gallbladder emptying.
- These changes result in super-saturation of bile with cholesterol and a predisposition to gallstone formation.
- We present the case of a postpartum female with cholelithiasis and choledocholithiasis.



Image 1: Endoscopic retrograde cholangiopancreatography (ERCP) showing some of the multiple stones that came out after sphincterotomy was performed. .

## Case Presentation

- A 28-year-old female with past medical history significant for hypothyroidism and recent pregnancy, presented to the hospital with complaints of right upper quadrant (RUQ) abdominal pain.
- She had gone out of the country in order to seek medical attention and was prescribed Flagyl and Ketorolac, with no symptomatic relief.
- She had worsening RUQ pain described as “colicky”, worse in the epigastric region, in addition to significant pruritus.
- Patient’s review of systems was positive for nausea, dark urine, and jaundice for the last 4 days. In the hospital, she had abnormal liver enzymes.
- Ultrasound and abdominal CT presented with significant biliary dilation.
- Magnetic resonance cholangiopancreatography (MRCP) demonstrated “innumerable gallstones”, measuring between 3 to 6mm, located in the cystic and common bile duct. Endoscopic retrograde cholangiopancreatography (ERCP) with sphincterotomy resolved patient symptomatology.

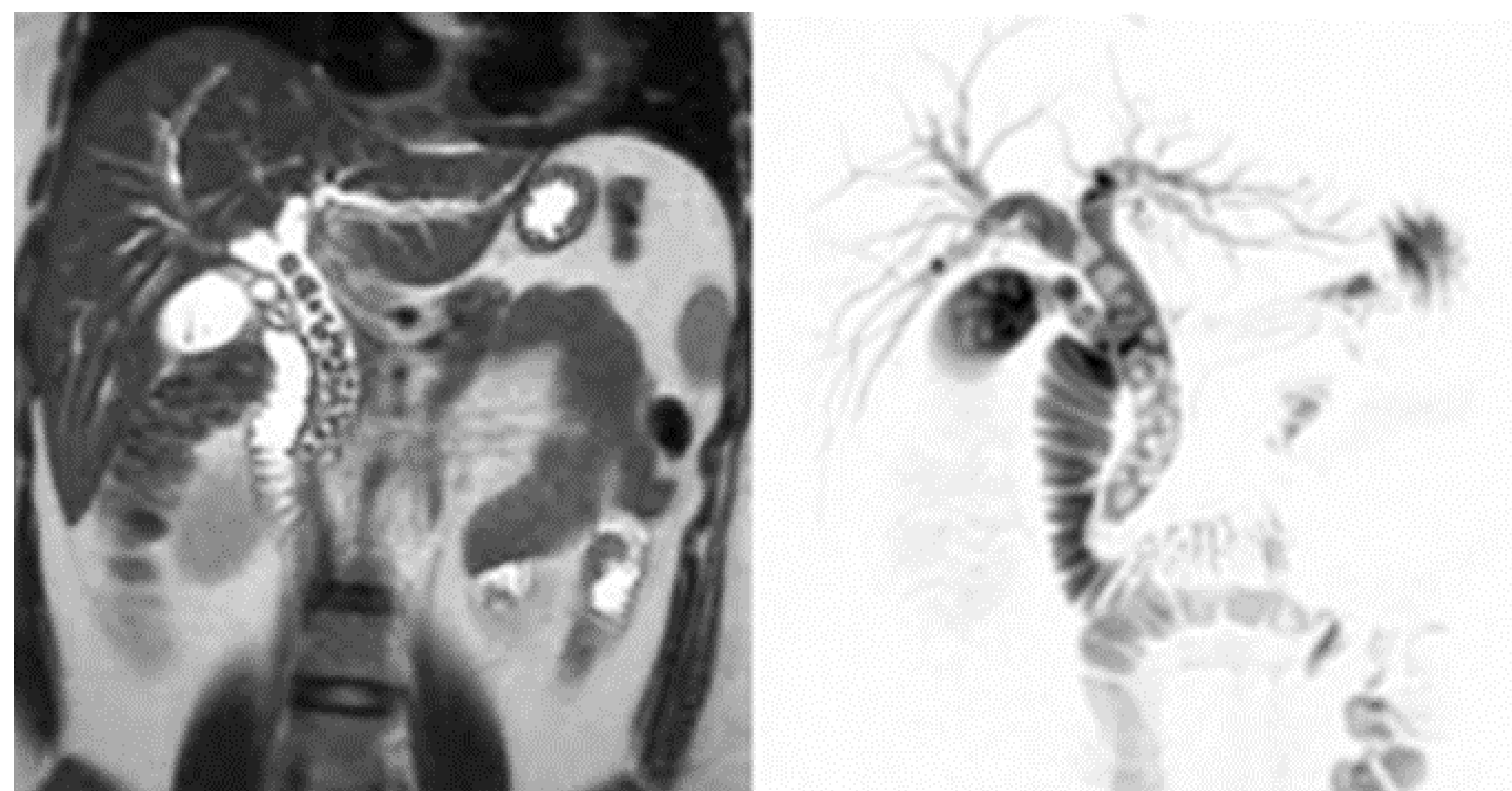


Image 2: Shows the magnetic resonance cholangiopancreatography (MRCP) of our patient with innumerable stones on the common bile duct.

## Conclusion

- Despite the increased frequency of gallstone disease in pregnancy, there is no consensus on the management of symptomatic cholelithiasis and/or choledocholithiasis, in this setting.
- Conservative management with symptomatic treatment has been the gold standard for decades.
- The risk for recurrent symptoms and subsequent hospital admission is high, at times up to 72%.
- The Society of American Gastrointestinal and Endoscopic Surgeons recommend laparoscopic cholecystectomy as the treatment of choice for symptomatic cholelithiasis, regardless of pregnancy state.
- Developing a standard guide to manage symptomatic cholelithiasis and choledocholithiasis in pregnancy would save both time and cost to the patient and healthcare system.

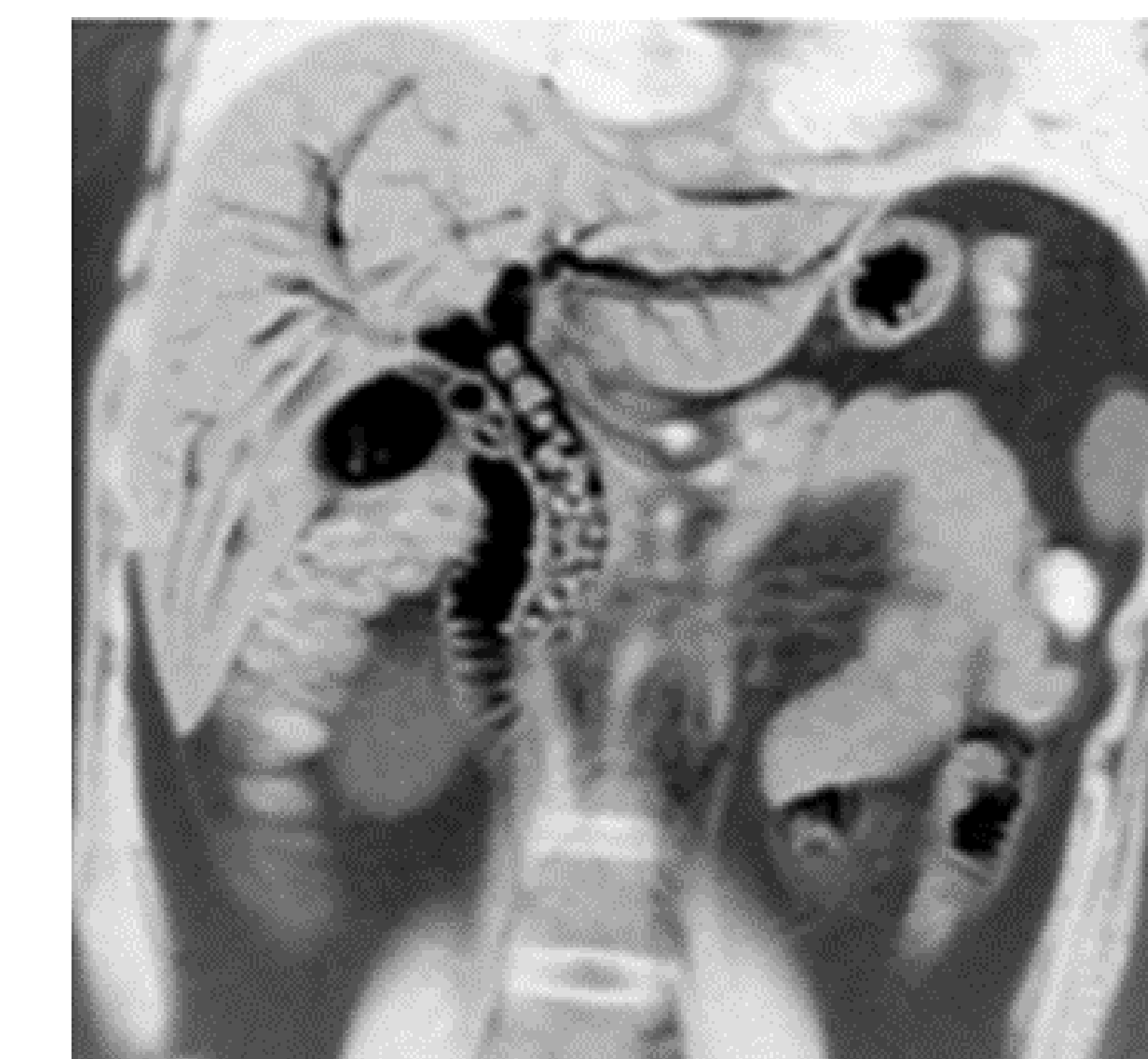


Image 3: Shows the magnetic resonance cholangiopancreatography (MRCP) of our patient with innumerable stones on the common bile duct.

## References

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