

# Cholecystomegaly: Management and Treatment

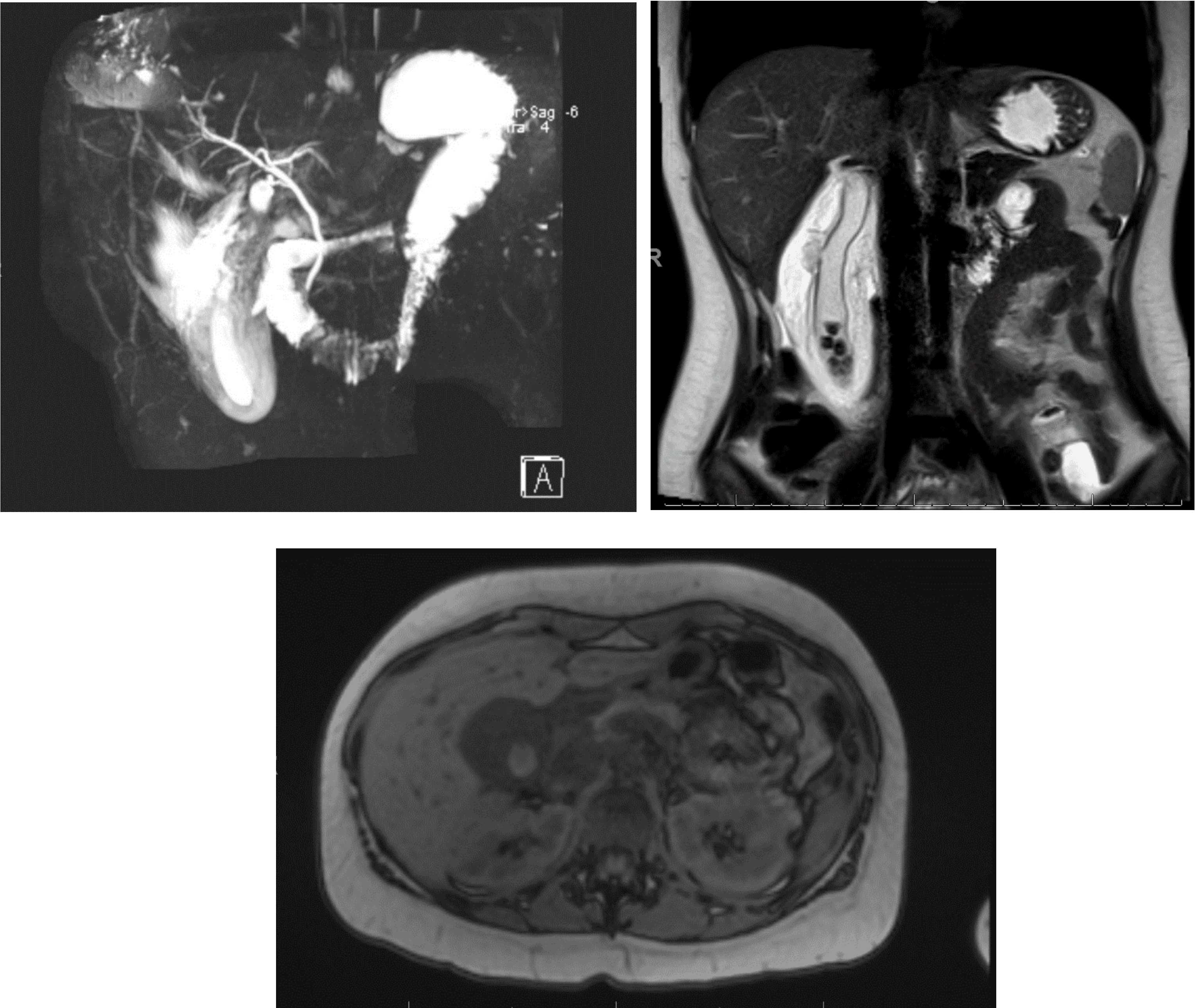
Derek Lim DO, Shinban Liu DO, Prashant Sinha MD  
NYU Langone - Brooklyn

Department of General  
Surgery

## CASE PRESENTATION

Patient is a 22 year old Middle Eastern female with no significant past medical or surgical history presented to the emergency department with a 2 day history of worsening sharp right upper quadrant pain with associated nausea, vomiting, and PO intolerance. The pain started a few months prior, however it was self-limited with diet modifications. An ultrasound demonstrated a contracted gallbladder with a 15mm gallbladder wall. White blood cell count was within normal limits and total bilirubin was slightly elevated to 1.8 mg/dL. No palpable mass was noted on physical exam. An MR cholangiopancreatography was performed which demonstrated a dilated gallbladder measuring 11.5 x 2.5 cm, a severely thickened gallbladder with a small intramural collection and multiple gallstones. The patient proceeded with a laparoscopic cholecystectomy. Intraoperatively, the omentum was densely adherent to the gallbladder and needle decompression of the gallbladder was unsuccessful due to the wall thickness. The gallbladder was subsequently removed without any complications. Patient's remaining hospital course was uncomplicated. Surgical pathology returned demonstrating acute on chronic cholecystitis with a 1.5cm wall and filled with hemorrhagic and brown calculi measuring up to 1.4cm in size.

## IMAGES



MRI cholangiopancreatography demonstrating a 11.5 x 2.5cm severely thickened gallbladder filled with multiple stones and a small intramural collection.

## DISCUSSION

Cholecystomegaly or “Giant Gallbladder” disease is a rare pathology encountered in the surgical world. There have been few reported cases, most of which occurred in the elderly (>65 years). Congenital anomalies should be considered for younger patients with this pathology. Kuznetsov et al. defined an enlarged gallbladder to have a volume of 200-300cc and a giant gallbladder as exceeding 1500cc (the average weight of the liver). The etiology remains unknown, however certain factors exist to allow the gallbladder to reach this size without life-threatening sequela; mechanical obstruction, low bacterial contamination of the bile and adequate vascular supply to allow for regeneration of the gallbladder wall and steady distention. Preoperative imaging, such as MR cholangiopancreatography, is important to differentiate biliary pathology and delineate anatomy. Removal of the gallbladder is recommended to prevent the development of complications like cholangitis or bowel obstruction. The cause of cholecystomegaly still remains uncertain and warrants further research. The management and treatment remains similar to acute cholecystitis however this case is an example of the importance of obtaining your “critical view” in order to perform a safe cholecystectomy.

## REFERENCES

- 1) Kuznetsov AV, Borodach AV, Fedin EN, Khromova AD. Giant Gallbladder: A Case Report and Review Of Literature. International Journal of Surgical Case Reports. 2014Aug12;5(10):673–6.
- 2) Tessier DJ, McMahon L, Harold KL. Cholecystomegaly: Laparoscopic Treatment. Journal of Minimal Access Surgery. 2005Jun;1(2):82–3.