Two Cases of Post-COVID Cholangiopathy: A Rare complication of SARS-COV-2 Infection

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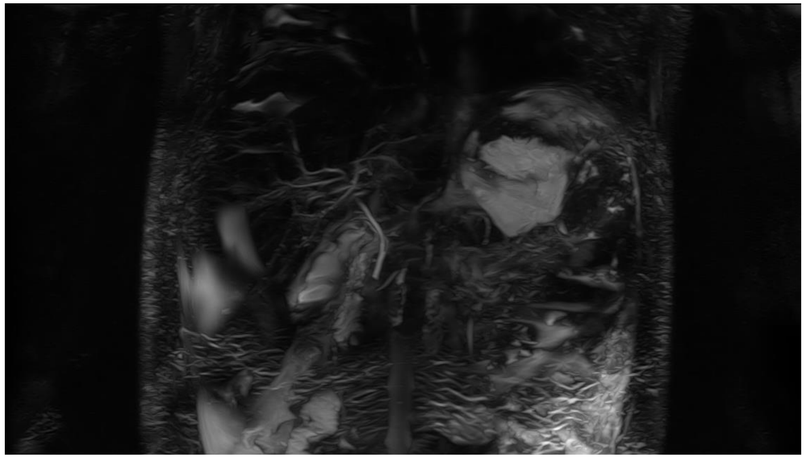
Background

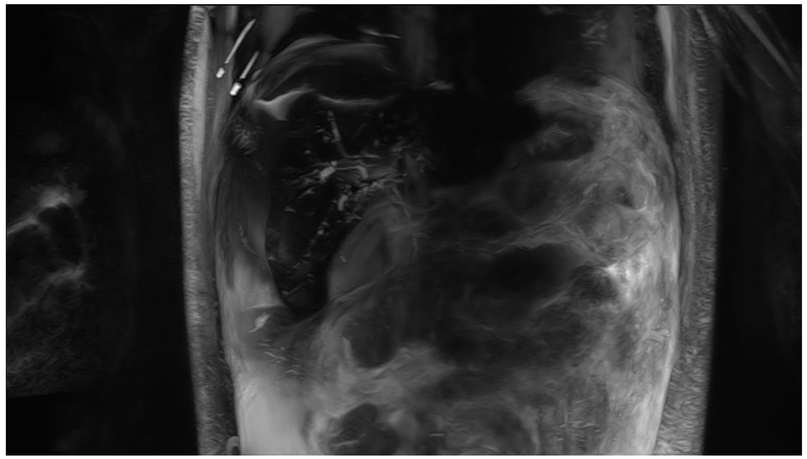
- Post-COVID cholangiopathy is a rare but devastating complication of SARS-CoV-2 infection
- Current knowledge is limited to a handful of case series/reports
- Herein, we present two unique cases of post-COVID cholangiopathy to highlight the differing severity of this novel syndrome

Patient 1: 69-Year-old Female

- A 69-year-old Hispanic female with a past medical history of prior drug-induced liver injury admitted in August 2020 for acute hypoxic respiratory failure secondary to SARS-CoV-2 pneumonia
- The patient required mechanical ventilation and vasopressor support for a total of 19 days
- Day 390: Laboratory values: ALP (985 U/L), GGT (>1600 units), TBILI (0.4 mg/dl).
- MRCP with intrahepatic biliary ductal dilatations.
- The patient continues to follow with hepatology with a most recent MELD of 6



Patient 2 MRCP Day 49: Patent intra/extrahepatic bile ducts



Patient 2 MRCP Day 139: Beading of intra/extrahepatic bile ducts

Patient 2: 27-year-old Male

- A 27-year-old Hispanic male with CKD admitted in August 2021 for provoked seizures in the setting of active SARS-CoV-2 infection
- The patient rapidly deteriorated requiring mechanical ventilation, vasopressors, and continuous renal replacement therapy resulting in a prolonged hospitalization
- Day 49: Laboratory values peaked: TBILI (31.6 mg/dl), GGT (1569 U/L), and ALP (5000 U/L)
- Day 79: liver biopsy showed signs of large duct obstruction
- Day 139: Intrahepatic biliary strictures and dilatation not seen on prior MRCP
- The patient was unable to undergo liver transplant evaluation despite a MELD of 36

Discussion

- Exclusively reported in COVID patients requiring ventilation and vasopressor support
- Disproportionate elevation in ALP followed by delayed intrahepatic biliary strictures and dilatations
- Likely due to biliary ischemia induced by COVID hypoxemia and vasopressor-induced splanchnic hypoperfusion
- Only definitive treatment is liver transplantation