

Introduction

Post-COVID-19 Cholangiopathy is an emerging sequela of the coronavirus infection. Cases have been reported of a secondary sclerosing cholangitis (SSC) type picture presenting insidiously in severe COVID patients.

Case Description

45-year-old female, with recent severe/complicated COVID infection presented with abnormal liver function tests (LFTs).

Acute hepatitis panel, HIV, ANA, anti-smooth muscle antibody, and anti-mitochondrial antibody were negative.

MRCP noted mild biliary dilation and intrahepatic biliary strictures. ERCP showed diffuse rarefaction of the left and right intrahepatic biliary branches.

Liver biopsy showed minimal portal hepatitis with prominent bile duct injury and cholestasis with a few bile infarcts.

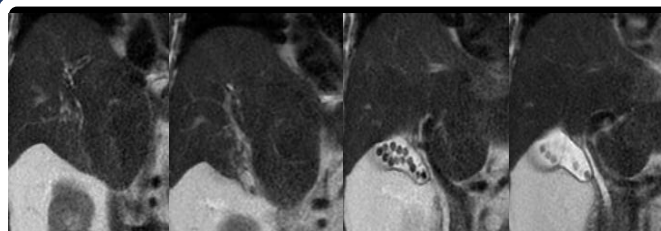
Findings were consistent with SSC likely due to COVID.

LFTs normalized in 6 weeks with treatment of Ursodiol. MRCP 10 & 16 months later demonstrated significant improvement in intrahepatic biliary strictures.

Imaging



ERCP with diffuse rarefaction of the left and right intrahepatic biliary branches



Subsequent MRCP with improvement in intrahepatic biliary strictures and biliary dilation

Discussion

Involvement of the digestive system has been noted in COVID with abdominal pain, nausea, vomiting, diarrhea and abnormal LFTs

Post-COVID cholangiopathy has emerged as a complication and has been characterized as a variant of secondary sclerosing cholangitis in critically ill patients (SSC-CIP)

SSC-CIP is distinguished from other hepatobiliary diseases by the persistence of cholestasis after recovery of other organ systems

Post-COVID cholangiopathy can be irreversible

Direct viral damage to the biliary epithelium through ACE2 receptors, inflammatory mediators, pharmacologic therapy, direct cytotoxic effects, focal hypoxia, and hypercoagulable state in COVID have been hypothesized as pathways for hepatobiliary damage

This case highlights Post-COVID cholangiopathy as a rare complication and to encourage work up of abnormal LFTs in the setting of Covid-19 infection

References

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