

International Congress on **VIRAL HEPATITIS CONFERENCE**

April 18-19, 2022 | Webinar

SARS COV-2 INFECTION AND HEPATITIS**Liaqat Ali Khan***Kingdom of Saudi Arabia.*

Since the emergence of coronavirus disease -19 (COVID-19), caused by severe acute respiratory syndrome coronavirus-2 (SARS CoV-2), reported first from Wuhan, China¹, in December 2019, that swiftly spread globally. On March 11, 2020, the World Health Organization (WHO) declared the disease; a global pandemic². Initially thought that the disease is respiratory in nature. Besides the typical clinical presentations, subsequently, atypical manifestations³ of other organs and systems surfaced in a majority of the patients, including hepatic manifestations. Hepatic comorbidities; were reported in 2-11% of the COVID-19 patients, and the outcome of SARS CoV-2 infection is worst in those having pre-existing hepatic dysfunctions⁴. The common hepatic manifestations of SARS CoV-2 infection are hepatic enzymes derangements, specifically the aminotransferases, where hepatic injury and hyperproteinemia follows⁵.

Herein, we report a patient with hepatic derangements and mild hepatic injury in a patient with atypical presentation of SARS CoV-2 infection. A twenty-nine years old otherwise healthy, newly married female presented to our primary care clinic with a history of mild headache and loss of smell, as noted last night while working in her kitchen. There was no history of fever and cough. The patient was reassured and discharged. The next day she presented again with irritation in her throat, including her previous symptoms. On detailed inquiry, her husband is out of station due to his job. However, she was visited by her friend five days back in her home while her reverse transcriptase polymerase chain reaction (RT-PCR) is positive for SARS CoV-2. Clinical evaluation revealed nothing significant with normal ranged vitals. Owing to her positive contact history and clinical systems, an RT-PCR was requested including basic laboratory workup. The laboratory findings were as follows: White blood count (WBC), 5087cells/mm³, platelets 153000cells/mm³, Hemoglobin (Hb) 11.5gm/dL, serum aminotransferase (AST) 112 IU/L, serum alanine aminotransferase (ALT) 86 IU/L, alkaline phosphatase (ALP) 105 IU/L, Serum total bilirubin 1.01 mg/dL, Serum direct bilirubin 0.8 mg/dL, INR 1. The patient was referred to nearby referral healthcare facility where she was treated as suspected COVID-19 and admitted in isolation under observation and followed there. Next day her rt-PCR came positive. While on repeat biochemistry, there was elevation in her biochemical markers which were as follows: AST 350 IU/L, ALT 435 IU/L, ALP 125 IU/L, Serum total bilirubin 3.50 mg/dL, Serum direct bilirubin 3.5 mg/dL, INR 1. The patient was evaluated for hepatitis A, B & C, but all were negative. The patient was on supportive care with no complication. On seventh day of admission the all biochemical markers were within normal range including negative rt-PCR for SARS CoV-2 having no symptoms. Thus the patient was discharged.

The proposed mechanism of hepatic injury of SARS CoV-2 include: i/ direct injury of the hepatocytes; ii/ virus induced myositis may lead to increase hepatic enzymes; iii/ binding of SARS CoV-2 virus on angiotensin converting enzyme-2 cholangiocytes; iv/ aggravation of hepatic injury the SARS CoV-2 virus in patients with pre-existing viral hepatitis⁵. Physicians working first-in line should be vigilant enough to sort out SARS CoV-2 infected patients in pre-clinical stage and be aware of the possible involvement of other organs beside respiratory to manage accordingly to avoid complications.

Biography

Dr Liaqat Ali Khan has completed his Master from university of South Wales, United Kingdom. Currently he is working as Family Physician in the Ministry of Health, Kingdom of Saudi Arabia. Dr Khan is an academic writer, and have a keen interest in research and published more than 20 papers in world's reputed journals. He is also serving as an editorial board member for repute.