Dexamethasone/tocilizumab

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Worsening of hepatitis E virus infection following off label use: case report

A 69-year-old man exhibited worsening of hepatitis E virus (HEV) infection during off label treatment with dexamethasone and tocilizumab for COVID-19 [dosages and routes not stated].

The man with various comorbidities was diagnosed with COVID-19 and was admitted to a hospital in United Kingdom on 02 March 2021. On day 7 of admission, he was transferred to the ICU, and he was intubated and ventilated. He received treatment with remdesivir, and off-label dexamethasone and tocilizumab. He also received prophylactic unspecified antibacterials [antibiotics]. Significant improvement was observed and he was transferred to a medical ward on 28 May 2021. He initially had some derangement in his liver function tests (LFT) which became more marked during admission period. He was tested for viral hepatitis and was found to have HEV infection. His HIV test was negative. To find out the cause of infection, retrospective testing of his stored serum samples was performed, which revealed community-acquired HEV infection. Serum sample collected on the day of admission had viral load of 266204 IU/mL, which increased to >5000000 IU/mL at the time of diagnosis. He had been carrying viral load for 3 months, which was consistent with chronic HEV infection.

The man was started with ribavirin on 16 June 2021 (day 107 of admission), after which his viral load began falling. He was discharged on 18 June 2021 (day 109 of admission). At the time of follow-up, he was found to have positive HEV RNA test; hence, the course of ribavirin was extended for further 12 weeks. The outcome of this 12 week course was awaited. Worsening of the acute HEV infection to chronic HEV infection secondary to dexamethasone and tocilizumab was considered.

Lampejo T, et al. Nosocomial transmission of hepatitis E virus and development of chronic infection: The wider impact of COVID-19. Journal of Clinical Virology 148: Mar 2022. Available from: URL: http://doi.org/10.1016/j.jcv.2022.105083