

Aciclovir

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Acute kidney injury because of intratubular precipitation of crystals: case report

In a cohort study of 26 patients, who were hospitalised with COVID-19 between March and May 2020, a 44-year-old man was described, who developed acute kidney injury because of intratubular precipitation of crystals during treatment with aciclovir for a probable diagnosis of acute invasive HSV infection.

The man presented to the emergency department with a dry cough, thoracic pain, fever and exertional dyspnoea. Before the presentation, he had worked in a nursing home for several weeks with confirmed COVID-19 cases. At admission, the SARS-CoV-2 RT-PCR test on the nasopharyngeal swab was negative. Because of high radiographic and clinical suspicion of COVID-19, he was placed in isolation. After 48h, he again tested negative for COVID-19. Serology test showed increased levels of HSV IgM and HSV IgG. Hence, a probable diagnosis of acute invasive HSV infection with viral hepatitis and viral pneumonia was made. Subsequently, treatment with IV aciclovir [*dosage not stated*] was initiated. However, 12h after the first dose of aciclovir, he developed acute kidney injury because of intratubular precipitation of crystals, which was considered as a known complication of aciclovir.

Hence, treatment with aciclovir was stopped, and the man was treated with IV fluid therapy. Subsequently, his kidney function became normal. After resolution of respiratory complaints, he was discharged from the hospital after 12 days. The HSV IgM level also decreased after the resolution of respiratory complaints. The PCR of BALF showed a positive result for SARS-CoV-2 and a negative for HSV-1/2. Therefore, a diagnosis of COVID-19 was confirmed. It was considered that due to false-positive HSV serology, an initial diagnosis of HSV infection was made.

Vandervore L, et al. False positive Herpes Simplex IgM serology in COVID-19 patients correlates with SARS-CoV-2 IgM/IgG seropositivity. *Diagnostic Microbiology and Infectious Disease* 103: No. 1, May 2022. Available from: URL: <http://doi.org/10.1016/j.diagmicrobio.2022.115653>

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