Ketamine

S

Sclerosing cholangitis: case report

A 54-year-old woman developed sclerosing cholangitis during sedative treatment with ketamine [*dosage not stated*].

The woman, who was diagnosed with COVID-19, was admitted as she required mechanical ventilation for hypoxaemic respiratory failure. Her medical history was significant for type-2 diabetes, hypothyroidism, hypertension and hyperlipidaemia. Initially, she received hydromorphone, midazolam and propofol. However, sedation was difficult with these drugs. Therefore, due to the insufficient sedation IV ketamine infusion was added to the regimen. After 15 days of ketamine infusion, she received oral ketamine for 5 days. After 9 days of extubation, she developed cavitary *Staphylococcal* pneumonia. Therefore, she was again received IV bolus of ketamine. Subsequently, she became critically ill and her laboratory tests showed a gradual increase in ALP (2239 U/L), GGT (773 U/L) after 5 days of initial ketamine stopped. Also, her AST and ALT increased to 1260 and 1729 U/L, respectively. Then, her abdominal ultrasound revealed heterogeneous liver parenchyma without bile duct abnormalities. Subsequently, her AST, ALT and ALP levels improved to 40, 123 and 990 U/L, respectively. However, she again became critically ill and received IV ketamine. Her ALP level again increased to 1720 U/L along with GGT, AST and ALT were 538, 266 and 407 U/L, respectively. Her MR cholangiopancreatography demonstrated intrahepatic dilatation with a beaded appearance as well as a dilated common bile duct with distal narrowing. Subsequently, her liver biopsy revealed a biliary ductular reaction with lobular inflammation and one small non-necrotizing lobular

granuloma without viral inclusions. Based on all the findings, she was diagnosed with ketamine-induced sclerosing cholangitis. Subsequently, her laboratory values improved and she was discharged by day 71. At a follow-up 3 months later, her liver enzymes improved as follows: ALP to 365 U/L, AST to 43 U/L and ALT to 55 U/L.

Knooihuizen SAI, et al. Ketamine-Induced Sclerosing Cholangitis (KISC) in a Critically Ill Patient With COVID-19. Hepatology 74: 519-521, No. 1, Jul 2021. Available from: URL: http://doi.org/10.1002/hep.31650

803590308