

**Azd-1222/covid-19-vaccine-pfizer-biontech/elasomeran****S****Autoimmune hepatitis: 3 case reports**

In a report, an 80-year-old, a 73-year-old and a 68-year-old women were described, who developed autoimmune hepatitis following administration of AZD-1222, COVID-19-Vaccine-Pfizer-BioNTech or elasomeran for COVID-19 prophylaxis [routes, dosages, duration of treatments to reactions onset and outcomes not stated].

The women, who had no history of auto-immune disease, received two doses of COVID-19-Vaccine-Pfizer-BioNTech [Pfizer-BioNTech vaccine] (first woman), one dose of elasomeran [Moderna vaccine] (second woman) and AZD-1222 [AstraZeneca Covid 19 vaccine] (third woman). All women rapidly developed auto-immune hepatitis, with diagnosis of hepatitis, on 10, 21 and 20 days after vaccination, respectively. Clinical symptoms were noted as asthenia, pruritus and jaundice with normal physical examination. Blood workup was performed, which showed severe acute hepatitis with total bilirubin of 78 mmol/L, 334 mmol/L and 752 mmol/L; ALT of 541 UI/L, 1027 UI/L and 2029 UI/L and AST of 583 UI/L, 1163 UI/L and 2314 UI/L, respectively for the three women. INR was normal in the two first women, for third woman INR was noted as 2.37. Screening for viral hepatitis including hepatitis A, B, C, E virus, HSV, CMV, EBV was negative. Additionally, normal levels of serum copper, TSH, ceruloplasmin and alpha-1-antitrypsine were noted. No history of travelling, intravenous drugs use, drinking and use of herbal supplements were reported. All women are positive for anti-nuclear antibodies. Initially, all three women were negative for specific liver autoantibodies including anti-SLA, anti-smooth muscle, anti-gp210, anti-mitochondrial and anti-Sp100; However, one woman developed anti-smooth muscle antibodies at one month of follow up. Elevated levels of total IgG were reported in all patients. Abdominal Doppler ultra sound revealed normal liver with no biliary dilation and no steatosis. Subsequently, liver biopsy was performed, which revealed portal intense lymphoplasmacytic infiltrate and diffuse acute hepatitis with lobular, with hepatocyte necrosis and interface hepatitis in all three women. Different clinical and biological evolution was observed in all women. The findings were consistent with autoimmune hepatitis secondary to vaccination.

The first two women received treatment with unspecified steroids for 4 weeks with a rapid good evolution. The third woman showed poor biological and clinical course with hepatic encephalopathy and liver failure with Total bilirubin: 820 mmol/L; INR of 3, requiring immediate listing for liver transplantation. She died 3 days after of sepsis and liver failure.

Erard D, et al. Autoimmune hepatitis developing after COVID 19 vaccine: Presumed guilty?. Clinics and Research in Hepatology and Gastroenterology 46: 1-2, No. 3, Mar 2022. Available from: URL: <http://doi.org/10.1016/j.clinre.2021.101841>

803647334