

Title:

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Carta 8533 inglés

AMA-positive hepatitis induced by the SARS-CoV-2 vaccine

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Dear Editor,

We present the case of a 56-year-old female with no relevant medical history, who was referred to our center due to jaundice and choluria with no fever or abdominal pain after the administration of the first dose of the BNT162b2 vaccine against SARS-CoV-2. Physical examination revealed only jaundice with no other findings. On admission, laboratory tests showed total bilirubin: 10.7 mg/dl, direct bilirubin: 8.4 mg/dl, alanine aminotransferase: 1665 U/l, aspartate aminotransferase: 1118 U/l, alkaline phosphatase: 383 U/l and gamma-glutamyltransferase: 410 U/l. Complete blood count and coagulation were normal. Serology for hepatotropic viruses (A, B, C and E) were negative. Cytomegalovirus, Epstein-Barr virus, herpes simplex virus 1 and 2, human immunodeficiency virus and parvovirus B19 serologies were negative for acute infection. Immunoglobulin levels were normal. Antimitochondrial antibodies were positive 1:640. Antinuclear, anti-smooth muscle and anti-LKM antibodies were negative. Abdominal ultrasonography and computed tomography were normal. There was no use of alcohol, drugs or herbal products. The patient had received the first dose of the Pfizer-BioNTech BNT162b2 vaccine against SARS-CoV-2 10 days before admission.

She remained clinically stable, with progressive biochemical improvement with no specific treatment, presenting a complete normalization of liver biochemistry after 6 months. She was diagnosed with BNT162b2 vaccine-induced toxic hepatitis, which was highly likely according to the CIOMS/RUCAM scale.

Discussion

Since Bril et al. first described a case of hepatitis suspected of being induced by a SARS-CoV-2 vaccine, other authors have reported similar observations (1-5). This case has the peculiarity of not requiring steroid treatment, as it had a spontaneous improvement. The increasing number of reported cases related to mRNA vaccines seems to support the hypothesis of a causal implication. In addition, the onset of autoimmune hepatitis has also been reported in the context of SARS-CoV-2 infection (6).

In the authors' opinion, the occurrence of these uncommon adverse events associated with vaccinations underlines the need for the immunization of the general population, in order to protect those patients that cannot receive vaccines against SARS-CoV-2 due to adverse events or other conditioning factors.

REFERENCES

1. Bril F, Al Diffalha S, Dean M, et al. Autoimmune hepatitis developing after coronavirus disease 2019 (COVID-19) vaccine: Causality or casualty? *J Hepatol* 2021;75(1):222-4. DOI: 10.1016/j.jhep.2021.04.003
2. Londoño MC, Gratacós-Ginès J, Sáez-Peñataro J. Another case of autoimmune hepatitis after SARS-CoV-2 vaccination - still casualty? *J Hepatol* 2021;75(5):1248-9. DOI: 10.1016/j.jhep.2021.06.004
3. Rocco A, Sgamato C, Compare D, et al. Autoimmune hepatitis following SARS-CoV-2 vaccine: May not be a casualty. *J Hepatol* 2021;75(3):728-9. DOI: 10.1016/j.jhep.2021.05.038
4. Tun GS, Gleeson D, Dube A, et al. Immune-mediated hepatitis with the Moderna vaccine, no longer a coincidence but confirmed. *J Hepatol* 2021:S0168-8278(21)02093-6.
5. McShane C, Kiat C, Rigby J, et al. The mRNA COVID-19 vaccine - A rare trigger of autoimmune hepatitis? *J Hepatol* 2021;75(5):1252-4. DOI: 10.1016/j.jhep.2021.06.044
6. Montón Rodríguez C, Navarro Cortés P, Lluch Garcia P, et al. Autoimmune hepatitis triggered by COVID-19. *Rev Esp Enferm Dig* 2022;114(1):64-5. DOI: 10.17235/reed.2021.8045/2021