## ACUTE DISSEMINATED ENCEPHALOMYELITIS AS AN ADVERSE VACCINE REACTION AGAINST COVID-19, A CASE REPORT.

"L." Dulcey<sup>1</sup>, "J." Theran<sup>2</sup>, "H." Moreno<sup>1</sup>, "C." Aguas<sup>4</sup>, "D." Villamizar<sup>3</sup>

<sup>1</sup>Internal Medicine, University of the Andes, Venezuela <sup>2</sup>Medicine, University of Bucaramanga, Colombia <sup>3</sup>Medicine, Industrial University of Santander, Colombia <sup>4</sup>Medicine, University of Santander, Colombia

Introduction: Acute disseminated encephalomyelitis is a neurological disorder characterized by inflammation of the brain and spinal cord caused by damage to the myelin, affecting the central nervous system diffusely. This condition can manifest spontaneously or secondary to infections or vaccination. Description of case: This is a female patient with no significant history who, 4 days after receiving the vaccine for COVID -19, presents neurological deterioration with 5 seizure episodes later. She was taken to the ICU where a brain tomography was performed, showing areas of extensive hypodensity in the right cerebral hemisphere, a demyelinating phenomenon was suspected, for which reason a contrasted brain magnetic resonance was ordered later, which agrees with a demyelinating phenomenon, the oligoclonal bands were negative and acute disseminated encephalomyelitis was suspected. which presented positive antibodies against the basic protein of myelin. Discussion: the present case constitutes a rare immunological phenomenon although it has already been reported against other vaccines, however it is one of the few descriptions with the use of the vaccine against COVID-19. Conclusions: Acute disseminated encephalomyelitis is a phenomenon with serious repercussions for the health of individuals who develop this condition, for the moment it will be necessary to evaluate the development of adverse vaccine effects in the long term without this constituting an invitation to discontinue its use as The only effective strategy to reduce morbidity and mortality.