MULTIPLE MONONEURITIS AND RENAL FAILURE AS A MANIFESTATION OF MULTISYSTEM INFLAMMATORY SYNDROME ASSOCIATED WITH SARS-COV-2

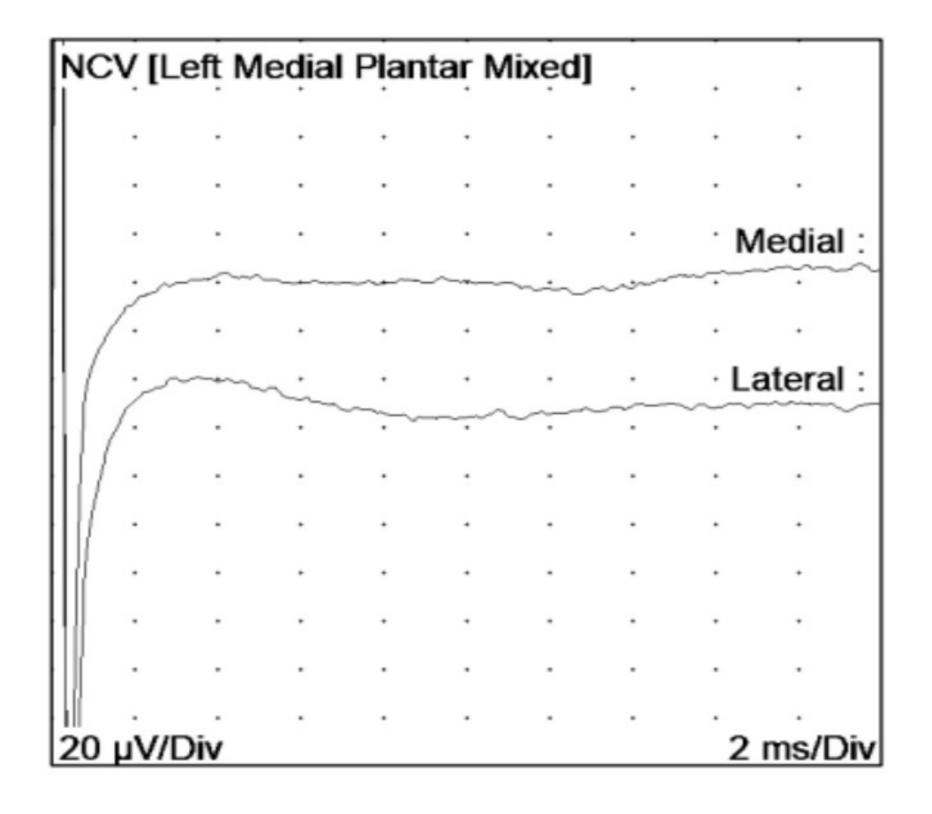


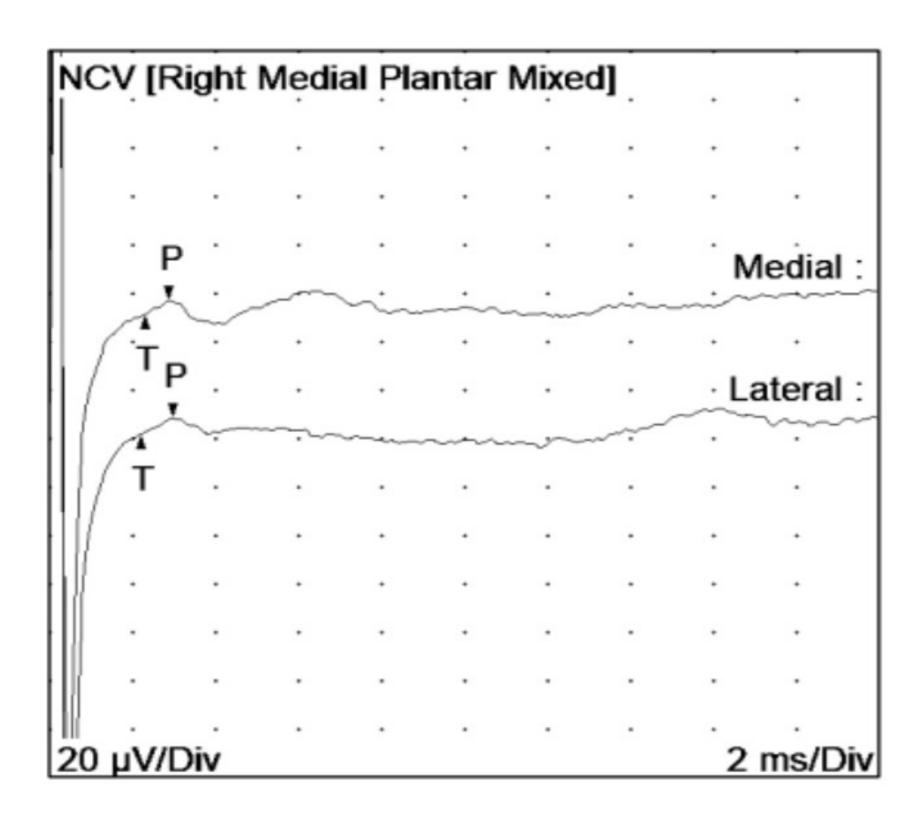
Guerra- Pabón María¹, Cadena-Rodríguez Gustavo ¹ Díaz- Ruiz Jorge ¹⁻²

 ¹ Department of Physical Medicine and Rehabilitation, National University of Colombia
² CIFEL - Physiatry and Electrodiagnosis Research Center Bogotá – Colombia

INTRODUCTION

Covid-19 infection can induce a hyper-inflammatory syndrome with dysfunction of different organs without the presence of respiratory failure. We present the case of a patient in whom Covid-19 infection facilitated small vessel vasculitis with renal and peripheral nerve involvement.





PATIENT INFORMATION AND CLINICAL FINDINGS

57-year-old man, without significant antecedents, presented Covid-19 infection confirmed by positive serology for SARS -COV-2 (igG) without respiratory compromise, who 2 weeks later presented neuropathic pain in the left foot, with intense allodynia at the foot sole. Two months later, he was hospitalized for worsening pain and progressive deterioration in kidney function. On physical examination, he presented stocking pattern numbness in the left foot, diminished left achilles tendon reflex, strength and muscle trophism were normal. Rapidly progressive glomerulonephritis and small vessel vasculitis were confirmed by renal biopsy, with positive ANCAS Anti-PR3 (Churg Strauss syndrome). Electrodiagnostic studies were compatible with multiple mononeuritis, with greater involvement of the left tibial nerve He received intensive immunosuppressive (Figure

Figure 1. A. Absence of mixed response to the left foot plantar nerves. B. Normal right response. NCV (Nerve conduction velocity) therapy (corticosteroids, cyclophosphamide, and rituximab) with good results.

DISCUSSION AND CONCLUSIONS

The clinical manifestations satisfy the criteria for multisystem inflammatory syndrome associated with SARS-CoV-2. The inflammatory response provoked by the Covid-19 infection is considered to be the precipitating factor for the small-vessel vasculitis, which secondarily caused the mononeuritis multiplex and rapidly progressive glomerulonephritis.

Needham E. J Neurol. 2021;268(8):2685–9.