A case of localized variant of Guillain-Carré syndrome associated with IGM anti-β2-GPI antibodies

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Facial diplegia and paresthesias (FDP) is a rare localized subtype of Guillain-Barré Syndrome (GBS) which is characterized by simultaneous facial diplegia, distal paresthesias and minimal or no motor weakness. We report a patient who presented with simultaneous weakness of bilateral facial nerve and paresthesias. A 73-year-old man presented with acute bilateral facial palsy and paresthesias in distal extremities preceded by flu-like symptoms. Extensive investigations were performed to evaluate the cause of his symptoms. Nerve conduction study (NCS) of upper and lower limbs showed sensory-motor polyneuropathy which was both axonal and demyelinating. In addition, facial NCS revealed absent of compound muscle and sensory nerve action potentials. Considering his clinical manifestation and relevant investigations, a diagnosis of FDP, a localized variant of GBS, was made. Interestingly, the patient was found to have serum IgM anti-β2-GPI antibodies, although other anti-ganglioside antibodies were all normal. Intravenous immunoglobulin was started at a dose of 0.4 g/kg/day for 5 days. After 10 weeks of treatment, his facial diplegia improved with mild residual facial weakness. Anti-β2-GPI antibodies are the main antiphospholipid antibodies, along with anticardiolipin and lupus anticoagulant, that characterize the autoimmune disease antiphospholipid syndrome (APS). Although APS was known to be associated with a variety of neurological manifestations, including stroke, multiple sclerosis, and transverse myelitis, its association with GBS and variants GBS was not well studied. We report a rare case of anti-β2-GPI antibody detected in a patient who complied with the typical clinical features of FDP, a localized variant of GBS.