

# Recombinant protein subunit COVID-19 Vaccine Induced Guillain-Barre Syndrome in an adolescent: A case report.

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## Abstract

Guillain- Barre Syndrome (GBS), an autoimmune neurological disease of peripheral nerves has been causally associated with COVID-19 vaccination in adults. However, no such report has been published so far in children. We describe a 13-year old female child who presented to emergency department with complaints of bilateral upper limb, lower limb and truncal weakness over three days following first dose of recombinant protein subunit COVID-19 vaccine (Corbevax). Clinical examination and nerve conduction studies showed pure motor axonal polyneuropathy with absent compound muscle action potential (CMAP) in all sampled nerves of upper and lower limbs which was consistent with the diagnosis of GBS after ruling out possible alternative aetiologies. A temporal association between first dose of protein subunit COVID-19 vaccine administered a day prior and symptom onset was noted. The causality assessment using World Health Organization (WHO) tool for adverse event following immunization (AEFI) assessment indicated vaccine-product related reaction categorized as A1. Patient's clinical condition improved after seven sessions of plasmapheresis. The purpose of this report is to create awareness among the health care professionals about COVID-19 vaccine induced GBS in children as early diagnosis and management can be critical in avoiding complications and improving patient outcomes.

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