MEDICAL PROGRESS: Guillain-Barré Syndrome

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Since the near-elimination of poliomyelitis, Guillain–Barré syndrome (GBS) is currently the most frequent cause of acute flaccid paralysis world wide, and constitutes one of the serious emergencies in neurology. The paper highlights the challenges and advancements of GBS research in both the clinical and scientific perspectives as below.

GBS still carries a grave prognosis. Patients with GBS manifest a spectrum of peripheral nerve disorders with several clinical variants that are characterized by the distribution of weakness of the limbs or cranial-nerve-innervated muscles, underlying pathology and associated autoantibodies. Campylobacter jejuni is the most frequent antecedent infection in GBS. Molecular mimicry between the bacterial and peripheral nerve components appears to elicit autoantibodies and the subsequent development of GBS following enteritis with C. jejuni. Eculizumab, erythropoietin and fasudil, which have been used in other unrelated medical conditions, have shown promise in animal models of GBS, although clinical studies are presently lacking.

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