

Table 1. Differential Diagnosis of Paralysis

Disease	Key Signs/Symptoms	Diagnostic Test	Treatment
Guillain-Barré syndrome	Ascending paralysis	Lumbar puncture	IVIG
Miller Fisher syndrome (variant of Guillain-Barré syndrome)	Ophthalmoplegia, limb ataxia, areflexia	Lumbar puncture looking for cytoalbuminologic dissociation, serology for anti-GQ1b antibody	IVIG
Myasthenia gravis	Fluctuating bulbar and extra-ocular muscle weakness, worsens with repeated use, improves with rest	Edrophonium test, serology for AChR antibody, NIF test	Pyridostigmine, IVIG
Lambert-Eaton myasthenic syndrome	Limb or truncal weakness worsened by continued use, no response to anticholinesterase drugs	Oncology workup	No emergency treatment available
Botulism	Bulbar palsy, descending paralysis	Mouse bioassay, PCR	Antitoxin
Viral encephalitis	Altered mental status, seizure, fever	Lumbar puncture	Antivirals, supportive care
Intracranial hemorrhage	Severe headache, trauma, blood thinners, other nonmotor neurologic deficits	CT	Operative, reverse anticoagulants/anti-platelet medication
Organophosphate pesticides poisoning	Cholinergic toxidrome	Cholinesterase activity	Atropine/2-PAM
Hypokalemia/ Hypermagnesemia		Electrolyte panel	Repletion
Diphtheria	Cranial nerve involvement (fever, dysphagia, respiratory symptoms, rash if bacterial infection)	Throat and blood cultures	Antitoxin, antibiotics
Porphyria	Abdominal pain, photosensitivity	Porphyrin tests	Hemin, phlebotomy, chloroquine, beta-carotene

IVIG = intravenous immunoglobulin; GBS = Guillain-Barré syndrome; AChR = acetylcholine receptor; NIF = negative inspiratory force; PCR = polymerase chain reaction; 2-PAM = pralidoxime.

findings. This is especially true when isolated bilateral ptosis is the presenting complaint. Administration of the acetylcholinesterase inhibitor edrophonium followed by assessment for improved muscle strength may

aid the diagnosis, but it is not a sensitive or specific test.

Routine laboratory studies have little utility in the evaluation of acute paralysis, but the serum potassium level may help diagnose hypokalemic periodic paraly-