

The Table below describes the Approach for Acute Onset of Muscle Weakness.

History	Examination	Diagnostic considerations	Initial investigations
Trauma	Neurological	Intracranial Spinal cord	Imaging
Seizure	Neurological	Todd's paralysis if rapid recovery of strength; Intracranial bleed Rhabdomyolysis	Imaging Urine
Strenuous exercise	Proximal weakness with tender large muscles	Rhabdomyolysis	Urine
Wound, contaminated food ingestion (e.g. shellfish, pork)	Fever Vision, swallowing	Botulism Trichinellosis	Eosinophils
Medication exposure		Steroid myopathy	
Organophosphate / carbamate exposure; Increased salivation, lacrimation, bronchospasm (Cholinergic excess)	Vital signs Cardiorespiratory function	Organophosphate / carbamate poisoning	RBC acetylcholinesterase activity
Potential exposure to ticks	Attached tick	Tick paralysis	Look for tick
Snake bite	Descending weakness		
Fever, flu-like illness	Fever, systemic wellness Tender / painful muscle groups, especially lower limb	Viral myositis Pyomyositis (usually focal) Toxoplasmosis	Influenza testing Infection screen including blood cultures Serology

Headache, vomiting	Neurological exam	Acute hemiplegic migraine Intracranial haemorrhage/ mass	Imaging
Recent febrile, respiratory or gastrointestinal illness	Ascending weakness	Guillain-Barre	Cerebrospinal fluid analysis Imaging (MRI)
Neck or back pain	Sensory level Bowel/bladder dysfunction	Acute myelopathy	EMG Spinal Imaging
Family history		Familial periodic paralysis	Electrolytes
Psychosocial stressors	Severe pain in absence of objective weakness	Idiopathic Pain Syndromes	

The Table below describes the Approach for Subacute / Chronic Muscle weakness.

History	Examination	Diagnostic considerations	Initial investigations
Headache, vomiting	Focal neurologic signs	Brain Tumour / mass	Imaging
Exercise related		Rhabdomyolysis Periodic paralysis Storage disorders	Urine Electrolytes Metabolic panels
Regression of motor milestones and/or myalgia	Proximal weakness (Gower sign) Rash Nail fold capillaries	Juvenile Dermatomyositis	Muscle enzymes MRI muscles
Developmental delay	Pseudohypertrophy of calves Proximal weakness (Gower sign)	Muscular dystrophies	Muscle enzymes Genetic testing Muscle biopsy
Floppy weak infant	Cranial nerves Fasciculations Tongue size	Spinal muscular atrophy Storage disorders Myasthenia gravis	Muscle enzymes EMG/Neve conduction Genetic testing Muscle biopsy
Family History		Muscular dystrophies	Muscle enzymes Genetic testing
Visual disturbance	Ptosis Diplopia Weakness increases with activity and improves with rest	Myasthenia gravis	Acetylcholine receptor antibodies