TABLE 4.1 SCREENING TESTS FOR CAUSES OF NEUROPATHY

Tests are blood tests, unless specified as urine of cerebrospinal fluid (CSF)

CONDITIONS	TESTS
Diabetic Neuropathy	Fasting glucose, glucose tolerance test, HgA1c
Nutritional Deficiencies	Vitamins B12 (cobalamin, B1 (thiamine), B6 (pyridoxine), copper
Toxicities (nutritional or environmental)	Blood vitamin B6 (pyridoxine), mercury, alcohol urine lead, mercury, and arsenic
Thyroid or Renal disease	TSH; thyroxine; T4; creatinine clearance
Guillain Barre Syndrome (GBS) and variants	CSF protein concentration, IgG anti-GM1, GD1a, GD1b, and GQ1b ganglioside antibodies
Chronic Inflammatory Demyelinating Polyneuropathy (CIDP)	CSF protein concentration; IgG anti-NF155 and CNTN1 antibodies
Multifocal Motor Neuropathy (MMN)	IgM anti-GM1 ganglioside antibodies
Autoimmune Autonomic Neuropathy (AAN)	IgG Anti-ganglionic acetylcholine receptor (gAChR) antibodies
MAG Neuropathy	IgM anti-MAG antibodies, serum Immunofixation electrophoresis (SIFE), quantitative immunoglobulins

Neuropathy with anti-GD1b or disialosy ganglioside antibodies.	IgM anti--GD1b antibodies, serum immunofixation electrophoresis (SIFE)
POEMS syndrome or neuropathy with osteosclerotic myeloma	Serum and urine immunofixation electrophoresis (SIFE and UIFE), free lambda light chains, Vascular endothelial growth factor (VEGF), IL6
Primary amyloidosis	Serum and urine immunofixation electrophoresis (SIFE and UIFE), free kappa and lambda light chains
Sjogren's Syndrome	Anti-SSA-Ro and SSB-La antibodies
Vasculitis	ESR, ANCA, Rheumatoid factor, ANA, dsDNA antibodies, SM/RNP antibodies, cryoglobulins, C3, C4, Hepatitis B and C
Celiac disease	Anti-gliadin and transglutaminase antibodies
Paraneoplastic neuropathies	Anti-HU (ANNA-1), VGKC LGI1 and CASPR2, CRMP5, and CV2 antibodies.

Infectious Neuropathies	Antibodies to Borrelia (Lyme disease), HIV-1, RPR, hepatitis C and B, West Nile virus Blood or CSF PCR for viral DNA- HIV, Hepatitis C and B, Cytomegalovirus (CMV), West Nile virus,
Hereditary Neuropathies	DNA sequencing for specific genetic alterations

5.2 Classification and Diagnosis – What Do You Call It

Neuropathies are classified according to the cause, and the clinical, electrophysiologic, and pathological, features. When the cause cannot be determined, it is referred to as idiopathic, or of unknown cause or etiology. In diabetes, as example, the neuropathy can be classified as diabetic polyneuropathy, diabetic small fiber neuropathy, diabetic mononeuropathy, and diabetic amyotrophy or lumbosacral plexopathy. The suffix "-itis", derived from the Greek, meaning inflammation, is usually used to denote an inflammatory etiology, as in mononeuritis, polyneuritis, multifocal neuritis, ganglioneuritis, or neuronitis. Multifocal neuritis is also referred to as mononeuritis multiplex.

Fiber Type – Is it Demyelinating or Axonal, and if Axonal, is it Large or Small Fiber

Neuropathies are generally classified as primarily demyelinating or axonal, usually based on the electrodiagnostic studies, and sometimes nerve biopsy. The distinction is important as if demyelinating, then the possible causes are limited to autoimmune or hereditary, whereas if axonal, then the possible causes are many, and sometimes cannot be