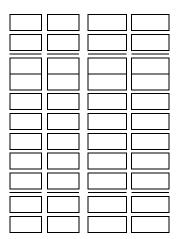
Tests for treatable causes of small-fiber polyneuropathy

Patient name Medical record number Date of birth

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BLOOD TESTS TO CONSIDER FOR ADULTS Chemistries (if glucose is high test for DM; if renal is high consider Fabry, mercury toxicity) Complete blood count (if low, consider B12 or copper deficiency, lead/arsenic toxicity) AST, ALT (liver function; if abnormal consider hepatitis or alcohol) Hemoglobin A1c (if high, consider 2 hour GTT) TSH thyroid screening Vitamin B12 levels (if 200-500pg/dl consider methylmalonic acid level) ESR (sedimentation rate; if elevated, consider inflammatory/dysimmune conditions) ANA (antinuclear antibodies; higher titers suggest lupus or dysimmune conditions) Anti-Ro (SS-A) and anti-La (SS-B) (if present, consider Sjögren's disease) CRP (C-reactive protein; if elevated, consider inflammatory/dysimmune conditions) Complement component C3 (if low, consider dysimmune conditions including lupus) Complement component C4 (dysimmunity; if low C3+C4, consider classic pathway) Hepatitis C serology (if abnormal consider testing for cryoglobulins) Lyme antibodies by Western blot (for inhabitant or visitor to endemic area) SPEP/IFIX (immunofixation tests for lymphoproliferative disorders) Free κ/λ light chains (tests for less common lymphoproliferative disorders) IgA anti-TTG (transglutaminase antibodies; if present consider celiac sprue)



SECONDARY TESTS TO CONSIDER IN SPECIFIC POPULATIONS

2 hour, 75 g fasting glucose-tolerance test (strongly consider for all at risk for DM) HIV (CDC recommends everyone ages 13-64 be tested ≥ once, high-risk more often) Phenotype-guided single gene sequencing (e.g., HSAN, SCN9A, Fabry, TTR) Whole exome or genome sequencing (consider in children, strong family history) Cryoglobulins, cryofibrinogens, viscosity (consider for myeloma, hep C, RA, SLE) Pyridoxine (if high, consider vitamin B6 neurotoxicity, if low, consider B6 deficiency) Anti-ds DNA, anti-Smith (consider if ANA present) Urine protein electrophoresis to identify Bence Jones paraproteins 24 hour urine for arsenic, lead, mercury, cadmium (for artists, welders, miners) Abdominal fat-pad biopsy for amyloid OTHER TEST PERFORMED

Check for toxins and medications; e.g., cancer chemotherapy or immune checkpoint inhibitors, HIV therapy, colchicine, isoniazid, dapsone, hydralazine, lithium, phenytoin, vitamin B6, disulfiram, amiodarone, procainamide, perhexiline, streptokinase, nitrous oxide, metronidazole, nitrofurantoin, gold, thalidomide, TNF-antagonists, antimicrobials (chloramphenicol, fluoroquinolones, metronidazole, nitrofurantoin), history of GI surgery, malabsorption, alcoholism, exposure to inorganic arsenic, thallium, mercury, industrial toxins, organophosphate insecticides.

Tests reported as futile for general population screening in idiopathic SFN include serum ACE, heavy metals (arsenic, lead, mercury, cadmium), folic acid and vitamin B12 levels. Statin use was found not associated with SFN (Warendorf J. et al, Neurology, 2019).

References

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