

Tests for treatable causes of small-fiber polyneuropathy

Patient name
Medical record number
Date of birth

Date: _____ / _____ / _____

BLOOD TESTS TO CONSIDER FOR ADULTS

- Complete blood count (if low, consider B12 or copper deficiency, lead/arsenic toxicity)
- Chemistries (if high glucose test for DM; if renal dysfunction consider Fabry, mercury toxicity)
- AST, ALT (liver function; if abnormal consider hepatitis or alcohol)
- Hemoglobin A1c (if elevated strongly consider testing for diabetes)
- TSH thyroid screening
- Vitamin B12 levels (if 200-500pg/dl consider testing for methylmalonic acid)
- ESR (sedimentation rate; if elevated, consider inflammatory/dysimmune conditions)
- ANA (antinuclear antibodies; higher titers suggest lupus or dysimmune conditions)
- Complement components C3 and C4 (if low, consider 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)
- 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)

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 \geq once, high-risk more often)
Methylmalonic acid (consider if vitamin B12 level less than 500 pg/dL)
Thiamine (if low, consider vitamin B1 deficiency)
Pyridoxine (if elevated, consider vitamin B6 neurotoxicity)
Anti-ds DNA, anti-Smith (consider if ANA present)
Cryoglobulins, cryofibrinogens, viscosity (consider for myeloma, hep C, RA, SLE)
Fasting serum triglycerides (can worsen diabetic polyneuropathy)
Urine protein electrophoresis to identify Bence Jones paraproteins
24 hour urine for arsenic, lead, mercury, cadmium (for artists, welders, miners)
ACE (angiotensin converting enzyme; for sarcoidosis in patients with lung symptoms)
Phenotype-guided genetic sequencing esp. if family history (e.g., HSAN-1, SCN9A)
Abdominal fat-pad biopsy for amyloid
OTHER TEST PERFORMED

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Check medications e.g., therapy for cancer or HIV, statins, 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.

References

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