

# Neuropathy

# Possible Causes

- Alcoholism
- Auto immune disease---Sjogren's syndrome, Lupus, Arthritis, Guillain-Barre Syndrome, MS
- Diabetes
- Exposure to toxins----- Heavy metals (lead, mercury, arsenic), Industrial solvents, pesticides
- Drugs/medications-----Chemotherapy, Statins etc.
- Infections----- Lyme disease, shingles, Epstein Barr virus, Hepatitis C., Leprosy, HIV
- Trauma-----Accidents, sports injuries, repetitive tasks
- Tumors
- Vitamin Deficiencies-----B-vitamins, Vitamin E, Niacin are crucial to nerve health
- Other diseases-----Kidney disease, liver disease, connective tissue disorders, hypothyroidism
- Mitochondrial insufficiency-----Poor energy production

# Testing

- Complete Thyroid Panel ----- TSH, free T4, free T3, T3 uptake, reverse T3, TPO antibodies, Thyroglobulin antibodies
- NO2 levels
- Antioxidant levels
- Neurotransmitter levels
- Blood pressure
- Circulation
- HbA1C, insulin, fasting blood sugar,
- Immune system, CBC, CMP, ANA, HS-CRP, Rheumatoid factor, Sed Rate
- B12, Folate
- Hormones
- Heavy metals

# Pharmaceutical Alternatives

- Pain relievers----NSAIDs, Narcotics, Steroids
- Anti-seizure meds---Neurontin, Lyrica
- Anti-depressants--- Tricyclics(amitriptyline, nortriptyline, doxepin), Effexor, Cymbalta
- Compounded topical creams---may contain anti-inflammatories, pain relievers (Ketamine), anesthetics etc. (reduce side effects and deliver medication directly to the effected tissue)

# Nutritional Alternatives

- Immune Modulators---IgG, anti-inflammatory herbs, colostrum, Proline rich Peptides (PRP), betaglucans, astragalus, holy basil etc.
- Enzymes----Digestive and anti-inflammatory
- Blood sugar modulators---- ALA (alpha lipoic acid), magnesium, cinnamon, bitter melon, Gymnema, trace minerals, GTF chromium
- Chelation if necessary----DMSA, EDTA, DMPS, cilantro etc.
- Liver/kidney support----NAC, Glutathione, ALA, Milk thistle etc.
- Vitamins----Active B-vitamins ( especially methyl cobalamin , Methyl folate, P5P, ), Vitamin C, Natural vitamin E with mixed tocopherals, Niacin (niacinamide), Vitamin D3
- Magnesium, calcium, zinc, trace minerals
- Mitochondrial energy support---- Coenzyme Q10, NADH or Nicotinamide riboside, ribose, Acetyl L-Carnitine, Bio PqQ, MCT oil or coconut oil,
- Omega-3 fatty acids---- Fish oil, flax oil, EPA/DHA
- NO2 support----Hawthorn, citrulline, L-arginine, NEO-40

# Dietary Considerations

- Eliminate processed sugar
- Anti-inflammatory diet-----eliminate gluten, dairy, and any known food allergies or sensitivities( consider testing)
- Add beneficial oils to diet---coconut, olive, grapeseed etc.
- Eliminate trans/hydrogenated fats from diet
- Reduce carbohydrates to about 15% of calories
- Eat more alkaline foods-----vegetables, fruits
- Consume a large variety of colored vegetables and fruits
- Higher protein and fat consumption will result in better control of blood sugar
- Drink water (lots of it)
- Use sea salt, pink salt, or Himalayan salt rather than table salt

# Exercise

- Resistance training---weights, bands, body weight, squeeze muscles
- Aerobic exercise---walk, jog, swim, move your body
- Improves circulation, elimination, nutrient delivery, release of anti-inflammatory molecules