

Neurological Protocol: Restoring Neurological Function

Introduction

Chronic degenerative neurological concerns are being reported more frequently in everyday clinical practice, including Parkinson's disease, multiple sclerosis, and dementia.

Assessment

For neurological damage or degenerative risk:

1. Thorough clinical neurological workup, potentially including CT scan, electromyography, MRI, and PET when diagnosis is uncertain.¹
2. Potential laboratory considerations:
 - a. Insulin resistance assessment, such as an oral glucose tolerance test
 - b. Hemoglobin A1c
 - c. Fasting glucose
 - d. Hs-CRP
 - e. Homocysteine
 - f. Methylmalonic acid (B12)
 - g. 25-OH vitamin D levels
 - h. Anti-myelin antibodies
 - i. AST (aspartate aminotransferase)
 - j. Markers for oxidative damage and genetic risk, such as urinary levels of 8-hydroxy-deoxyguanosine and APOE gene testing, respectively

General Recommendations

1. Monitor progress of patients using:
 - a. Standardized Mini-Mental State Examination at <https://bit.ly/2BLAFGU>
 - b. Unified Parkinson's Disease Rating Scale at <https://bit.ly/2VXwleB>
 - c. Standardized neurological exam and EDSS for multiple sclerosis at <https://bit.ly/3ffj0pS>

Specific Treatment Plan

	Mild	Moderate	Severe
Week 1: Initiation Phase	<ul style="list-style-type: none"> • Mediterranean-style diet^{2,3} • Aerobic and resistance exercise training^{4,5} • Calligraphy therapy^{6,7} 	<ul style="list-style-type: none"> • Mediterranean-style diet^{2,3} • Goal of 10,000 steps per day as assessed by pedometer, with individualized targets⁸ • Age-appropriate yoga: Three 55-minute sessions per week^{9,10} 	<ul style="list-style-type: none"> • Mediterranean-style diet^{2,3} • Tai chi: 60 minutes twice weekly^{9,10}
Week 2–7: Intensive Therapy Phase	<ul style="list-style-type: none"> • Mito AMP®: 1 softgel per day^{13–15} • PQQ-10: 1 softgel per day^{16,17} • OptiMega-3®: 1 softgel BID with meals^{18–20} • Vitamin D3: 1000 IU QD^{21,22} 	<ul style="list-style-type: none"> • Mito AMP: 2 softgels per day^{13–15} • PQQ-10: 2 softgels per day^{16,17} • OptiMega-3: 1 softgel BID with meals^{18–20} • Theracurmin® 2X: 1 capsule BID²³ • Vitamin D3: 2000 IU QD^{21,22} 	<ul style="list-style-type: none"> • Mito AMP: 3 softgels per day^{13–15} • PQQ-10: 3 softgels per day^{16,17} • OptiMega-3: 1 softgel BID with meals^{18–20} • Theracurmin 2X: 1 capsule BID²³ • Vitamin D3: 2000 IU QD^{21,22} • N-Acetyl-L-Cysteine: 1 capsule TID²⁴ • Melatonin: 3–5 mg at night^{25,26}
Week 8: Maintenance Phase	<ul style="list-style-type: none"> • Mediterranean-style diet^{2,3} • Aerobic and resistance exercise training^{4,5} 	<ul style="list-style-type: none"> • Mediterranean-style diet^{2,3} • Aerobic and resistance exercise training^{4,5} • Mito AMP: 1 softgel per day^{13–15} • PQQ-10: 2 softgels per day^{16,17} • OptiMega-3: 1 softgel BID with meals^{18–20} • Theracurmin 2X: 1 capsule QD^{21,22} • Vitamin D3: 1000 IU QD^{21,22} 	<ul style="list-style-type: none"> • Mediterranean-style diet^{2,3} • Aerobic and resistance exercise training^{4,5} • Mito AMP: 2 softgels per day^{13–15} • PQQ-10: 2 softgels per day^{16,17} • OptiMega-3: 1 softgel BID with meals^{18–20} • Theracurmin 2X: 1 capsule BID²³ • Vitamin D3: 1000 IU QD^{21,22} • N-Acetyl-L-Cysteine: 1 capsule BID²⁴

QD: daily; BID: two times per day; TID: three times per day.

Re-assessment

Repeat clinical and laboratory measurements.

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