Phase 2 Trial of Methotrexate in Myasthenia Gravis

Study Eligibility:

Inclusion criteria:
1. Patients 18 and older.
2. Patients must have MGFA MG grades 2, 3 or 4 generalized myasthenia gravis, according to the MGFA classification system (Jaretzki 2000). These grades correspond to mild (2), moderate (3), and Severe (4).
3. Elevated acetylcholine receptor antibody (AChR-Ab) titer. This test will have been performed at some time prior to entry into the study.
4. Patient’s signs and symptoms should not be better explained by another disease process.
5. Prednisone dose of at least 10 mg/day (or the equivalent in alternate days) and the subject must be on a stable dose of prednisone for 30 days prior to the screening visit.
6. Patients must be willing to complete the study and return for follow-up visits.
7. No history of thymoma, tumor, infection, or interstitial lung disease on chest CT, MRI, or chest X-Ray.
8. Patients must give written informed consent before participating in this study, a copy of the signed consent must be kept in the patient’s medical record.

Exclusion Criteria:
1. A history of chronic degenerative, psychiatric, or neurologic disorder other than MG that can produce weakness or fatigue.
2. Other major chronic or debilitating illnesses within six months prior to study entry.
3. Female patients who are premenopausal and are: (a) pregnant on the basis of a serum pregnancy test, (b) breast feeding, or (c) not using an effective method of double barrier (1 hormonal plus 1 barrier method or 2 simultaneous barrier methods) birth control (birth control pills, male condom, female condom, intrauterine device, Norplant, tubal ligation, or other sterilization procedures).
4. Altered levels of consciousness, dementia, or abnormal mental status.
5. Thymectomy in the previous three months.
6. Patients who have been medicated with azathioprine, cyclosporine, cyclophosphamide, mycophenolate mofetil, IVIg, or other immunosuppressive drugs within the last 60 days.
7. Clinical history of chronic or recurrent infections.
9. History of renal or hepatic insufficiency or liver enzymes.
10. History of bone marrow hypoplasia, leucopenia, thrombocytopenia, significant anemia, clinical or laboratory evidence of immunodeficiency syndromes.
11. Forced vital capacity (FVC) <50% of predicted.
12. MG Grade 1 (ocular only) or 5 (crisis, requiring ventilator).
13. PRIOR USE OF METHOTREXATE FOR MG at any time or for any other condition within the last two years.
14. Inability to provide informed consent.