

MEDICATIONS

Portions of an article by Ruth Wyler-Plaut in the Greater Boston Post-Polio Association newsletter, TRIUMPH.

At the April 30, 1995, New Jersey Polio Network Conference, Dr. Lauro Halstead.....described four drugs and four modalities that have been under study for the treatment of symptoms of the post-polio syndrome (PPS).

Mestinon (pyridostigmine bromide) is known to enhance neuromuscular transmission. It has been used for many years to treat myasthenia gravis. Preliminary studies showing an effect on generalized fatigue and muscle fatigability in some patients with PPS have prompted plans for a multi-center, double-blind study of efficacy in some 200 patients. Results could be available in two years. Mestinon has few side effects, mostly gastrointestinal, such as diarrhea and flatulence.

Somatomedin-C (Sm-C) (also known as insulin growth factor) appears to stimulate the growth of peripheral nerves and muscles. It is available only for experimental use. After studies found Sm-C levels to be low in some patients with PPS, a small study was done that showed temporary improvement in strength and endurance. More studies may be conducted. There is concern, but no evidence to date, that the use of such agents may also stimulate the growth of other tissues, such as tumors.

No further studies of two other drugs, **amantadine** and **prednisone**, are being planned because each exhibits undesireable side effects and lack of significant efficacy. Double-blind studies of each by the National Institute of Health failed to show any benefit for general fatigue or muscle fatigue, although in each case a few individuals did feel one or the other had helped.

Amantadine has been used over the years to treat various viral conditions as well as symptoms of Parkinson's disease and fatigue in patients with multiple sclerosis. The side effects of amantadine, such as edema and mental confusion, are disturbing. Prednisone, a corticosteroid known for its anti-inflammatory properties in immunologic disorders, is a very potent drug with significant side effects such as osteoporosis, increased susceptibility to infections, weight gain, acne, etc.

Dr. Halstead also discussed briefly the following modalities being used for PPS. The exact mechanism of action is unclear for any of these therapies, and each appears to need to be repeated from time to time to maintain an effect.

Electro-Acupuncture (delivered to the ear lobe) may be helpful in treating fatigue in some patients with PPS. According to one study, it can be painful.

Therapeutic Electrical Stimulation (TES)consists of low -level electrostimulation applied at night to a selected muscle over a period of months to years. It is probably most effective in muscles that become weak from disuse rather than inadequate nerve stimulation. Dr. Karen Pape, of the Magee Clinic in Toronto, Canada, first tried it in PPS. No studies have been published, but anecdotal reports of efficacy in PPS have prompted its use in the United States. There appear to be no side effects.

Multi-Modality Therapy (hydro-therapy, massage, pressure therapy, etc.) provides muscle relaxation,

1 of 2

muscle stimulation and possible muscle and nerve re-education. No studies of its use have been done, but patients with PPS have reported it effective in treating fatigue, muscle weakness and other aspects of PPS. It is available through a group called Futures Unlimited in Columbus, Mississippi.

Super Blue-Green Algae, a food supplement, was the only dietary treatment mentioned. Several people have reported it relieved some of the symptoms of PPS. It comes as tablets, capsules or powder and it is available from Cell Tech Co. of Klamath Falls, Oregon through distributors.



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