

## IVIg Update

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Currently, the most talked about treatment for a subgroup of polio survivors is IVIg (intravenous immunoglobulin), a blood product that is administered intravenously. Opinions vary from "the most promising treatment in years" to "very doubtful it will prove to be of benefit."

The March 27, 2012 issue (Vol. 78, No. 13; 1009-1015) of *Neurology* featured "Evidence-based guideline: Intravenous immunoglobulin in the treatment of neuromuscular disorders." The article, a Report of the Therapeutics and Technology Assessment Subcommittee of the American Academy of Neurology, can be accessed at [www.neurology.org/content/78/13/1009.Full.html](http://www.neurology.org/content/78/13/1009.Full.html)

The recommendation for post-polio syndrome is that "Evidence is insufficient to support or refute IVIg use in the routine treatment of postpolio syndrome." They further note "There is presently no effective treatment for postpolio syndrome."

The subcommittee based its comments on the review of two Class 1 studies that evaluated IVIg efficacy in patients with postpolio syndrome. (*Neurology* defines a Class 1 study as a randomized controlled clinical trial of the intervention of interest with masked or objective outcome assessment, in a representative population. Relevant baseline characteristics are presented and substantially equivalent among treatment groups or there is appropriate statistical adjustment for differences.)

Their conclusion was that "one Class 1 study (Gonzalez) showed a significant difference, but the difference was not clinically important for IVIg use on the most affected muscle in postpolio syndrome. One underpowered Class 1 study (Farbu) showed an effect of IVIg for pain in postpolio syndrome but no effect on strength or fatigue.

Dr. Kristian Borg, Professor and chair, Division of Rehabilitation Medicine, Department of Clinical Sciences, Karolinska Institute, Stockholm, Sweden, author on the Gonzalez study and numerous articles, tells PHI that "at the moment we are analyzing data from an open clinical study with IVIg treatment trying to determine which patients are *responders*."

"Preliminary data suggest that they are characterized by age below 65 years, paresis in the lower extremities and no concomitant disorders, as well as low quality of life for the SF-36 subdomains of vitality and pain. These individuals

are in ongoing studies to receive IVIg treatments to help determine who will benefit from the treatment.”

All experts agree that post-polio syndrome is not just one problem that will be solved by one answer. As for IVIg, it is too early to tout or dismiss the benefits. More research needs to be done, published and duplicated.

MORE on [www.post-poli.org](http://www.post-poli.org)

For more about IVIg. See:

Intravenous Immunoglobulin Treatment for Improving Muscle Strength  
Post-Polio Health, (Vol. 22, No. 2) 2006

Recent experience Using Immunoglobulin to Treat Post-Polio Syndrome  
Post-Polio Health, (Vol. 26, No. 3) 2006

More About IVIg, Post-Polio Health, (Vol. 23, No. 2) 2007

#### References

Gonzalez H, Sunnerhagen KS, Sjöberg I, et al. Intravenous immunoglobulin for post-polio syndrome: A randomized controlled trial. *Lancet Neurol* 2006; 5: 493-500  
Farbu E, Redand T, Vik-mo E, et al. Post-polio patients treated with intravenous immunoglobulin: A double-blinded randomized controlled pilot study. *Eur J Neurol* 2007; 14: 60-65.

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