Information Surrounding Article from Mayo Clinic Causes Frustration

press release from Mayo Clinic (Rochester, Minnesota) this August was entitled "Survivors of childhood polio do well decades later as they age." The release summarized the work published in the September 2006 Journal of the Peripheral Nervous System (Volume 11, Issue 3). "Electrophysiological findings in a cohort of old polio survivors" by Eric J. Sorenson, Jasper R. Daube and Anthony J. Windebank, reported on a randomly selected group of 50 polio survivors from the general population of Olmsted County, home of Mayo Clinic, they followed for 15 years. The average age of participants at the study's start was 53, and the patients were an average of 40 years past their childhood experience with polio.

The technical conclusions from the abstract were that "overtime, the cohort demonstrated a modest decline in summated compound muscle action potential amplitudes (CMAP) and a moderate decline in the summated motor unit number estimates (MUNE). There was no association between symptoms of late deterioration and magnitude of decline. Rather, the presence of these symptoms was associated with the magnitude of the residual deficits. Two patterns of neuron loss were modeled (linear and proportional decline). The summated MUNE was a more sensitive measure of loss of motor units than was the summated CMAP and appears to be a more valid measure of attritional loss of anterior horn cells. Of these two models of neuron loss, the proportional loss of motor neurons was a better fit of the data than a linear loss."

Headlines read, "No polio effects in later life" and "Problems attributed to aging." A Post-Polio Health reader was "outraged that ... post-polio syndrome was trivialized. My muscle wasting, weakness and tremor in my left hand and arm, in addition to atrophy in my right leg, is not part of the normal aging process."

When questioned, Eric J. Sorenson, MD, responded, "Unfortunately, our work has been interpreted that the post-polio syndrome doesn't exist. The point is that the majority of survivors of childhood polio do well for many years. There is a small minority, and we saw this in our population as well, that may follow a more aggressive course. Most polio survivors followed a relatively stable path with time over 15 years.

"The issue with aging is difficult. We did not include a normal aging group with our cohort and so we cannot draw any firm conclusion in that regard. The magnitude of change we saw in the cohort appeared to be commensurate with what would be expected in normal aging, however, there was a wide range. Some changed very little; some changed more. This is good news for the majority. Our work is not intended to diminish the significant problems that do occur in some polio survivors, but rather reassure the many worried polio survivors that they are not necessarily destined for progressively increasing disability as they age." A

Martin B. Wice, MD, Chair of PHI's Medical Advisory Committee, reminds all of us that the effect of a small loss of strength can dramatically affect some survivors' ability to function. It has to do with the starting point. He explains, "If Warren Buffet loses 10% of his income, he won't notice, but if someone who earns \$15,000 a year loses 10% of their earnings, it will have a major impact on what they eat."

Want to read more?

Go to www.post-polio.org/ipn/ mayo.html.

"Aging Brings New Challenges for Polio Survivors" by Mike Mitka in JAMA, October 11, 2006, Vol. 256, No. 14, www.jama.com.