

More on the Mayo Clinic Study

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PHI published an article by anesthesiologist and polio survivor Selma H. Calmes, MD, in *Post-Polio Health* (Vol. 32, No. 3). Dr. Calmes is retired from Olive View/UCLA Medical Center, Sylmar, California, and has written extensively about anesthesiology and has generously advised health professionals and polio survivors over the last decades.

The article, “Important New Paper Published on Anesthesia and Polio” reported on the first scientific study of polio patients having anesthesia for major surgery. The study was done at the Mayo Clinic and compared each post-polio (PP) patient to two control patients of the same age with the same severity of preoperative illnesses and having similar surgery.¹ (If you misplaced it, Dr. Calmes’ article in *Post-Polio Health* is online at www.post-polio.org/edu/pphnews/.)

PHI received a few comments from polio survivors asking about the article essentially saying that it was much more positive than they expected; a few people found the article confusing.

It is true that the results of the study regarding anesthesia and the polio survivors in the study found no difference between the post-polio survivors and controls.

Consequently, we asked Dr. Calmes to write another article to address the major concern of those contacting us – *fear of over-sedation*. The article, “More on the Mayo Clinic Study of Anesthesia in Post-Polio Patients,” is posted online at www.polioplace.org/living-with-polio/more-mayo-clinic-study.

In the article, she discusses the evidence to see if the fear of over-sedation is justified and the need for peer-reviewed research vs anecdotes, i.e., individual polio survivor stories. (I vividly remember the well-known Jacquelin Perry, MD, saying at an early conference, “Our study showed 75% of polio survivors were experiencing pain.” There was a groan from the audience. She noticed and followed with, “BUT remember 25% were not.”)

Calmes mentions other things that can affect a person’s reaction to anesthesia. These include age, how much they weigh, other drugs that patients might take (some post-polio patients take narcotic drugs for pain and these add to the effects of anesthesia drugs), how well their liver works (many anesthesia drugs are broken down in the liver) and genetics.

The article talks about the fact that the issue of the non-effectiveness of drugs to reverse the effect of muscle relaxants has become a big issue in anesthesia practice in the last few years. It is not just post-polio patients who may have issues.

And, based on her experiences of talking to many survivors facing surgery, and her long experience as a practicing anesthesiologist (including attending to many polio patients), she expands on how anesthesiology has changed since the operations that many had during the epidemics. Her comments are reassuring.

So, yes, the study results were “positive” as her past articles have been. However, she and I would make this very important point. Respiratory failure is the greatest known risk for post-polio patients, especially for those who had bulbar and high-spinal polio. That is a significant concern. Pre-planning and selecting the right facility is a must for them.

Are we splitting hairs? Maybe, but we are hopeful that the days of polio survivors NOT choosing surgery out of fear of over sedation for a cancerous tumor or other situations that are life-threatening are over. ■

¹Van Alstine LW, Gunn PW, Schroeder DR, Hanson BS, Sorenson EJ and Martin DP. Anesthesia and poliomyelitis: A matched cohort study. *Anesthesia & Analgesia*. 2016; 122:1894-1900

Members who do not have access to the internet may call us at 314-534-0475 for a copy of Dr. Calmes’ article.

Post-Polio Health International has posted several articles and advice from Dr. Calmes on www.post-polio.org at www.post-polio.org/edu/majtop.html.