



Frederick M. Maynard, MD

Question: *I am a polio survivor who has had untoward and paradoxical responses to muscle relaxants and meds in particular, but also possibly to lidocaine pain patches used for the first time this year. I was hospitalized, through the emergency room, with cellulitis of my stronger leg while on vacation. I don't remember the first few days in the hospital, and suspect this was treatment-related. I found it scary to think that my medical history information was not treated as important! I would like to know if this reaction relates to being a polio survivor. I'm open to new information and suggestions of how to avoid this in the future.*

A: There are only a small number of drugs that have unique side effect problems among people with a history of paralytic polio, and the issues are greatest among people with the most extensive and severe residual nerve damage/weakness. Among the problematic drugs is one class of anesthetic agents, known as neuromuscular blockers (succinylcholine family). These drugs are used very rarely.

Other problems relate to medications, including some anesthetics, that are diffused throughout the body's tissues when given and are particularly concentrated in muscles. If a polio survivor has a significantly decreased proportion of total body tissue as muscle, then the usual doses of medications may have a greater than expected effect, because blood levels of the medications become higher than expected. Therefore it is wise for polio survivors with extensive chronic paralysis and/or a personal history of poor tolerance to medications to always begin new medications at a smaller than usual dose and increase doses slowly to the desired goal/benefit to minimize the risks of undesirable side effects or individual sensitivities.

Having said all of that, I do believe that individual differences in "medication tolerance" among the general population is very large and is probably more of a factor in explaining your problems of medication tolerance than is your history of polio

per se, especially if you experience "idiosyncratic" (unusual/unexpected/unique) reactions.

The most likely reason for some people to be "more sensitive to" or "have exaggerated responses to" some medications is the extent of individual differences in enzyme systems and effectiveness in metabolizing (processing) different drugs in the body. Recent scientific studies have shown these differences to be genetically based and some people now advocate testing for these differences before using certain drugs. I think there will likely be a lot more differences than current medical knowledge understands, and we will hear more about this subject in the future.

Relative to your distress about people not listening to your history, all you can do is keep a list of all drugs that have caused you problems. Call them "allergies," even if they are really "sensitivities," because all U.S. medical providers do ask about and consider a new patient's "List of Drug Allergies" before initiating treatment. Include "History of Polio" on the same list, and at least it will probably be seen! However, there are not many medical procedures or drug contraindications that result inherently from the fact that a person has had polio. The history of specific, or generalized, difficulty with medication tolerance/sensitivity would be the more important issue to emphasize. ▲

SEND YOUR QUESTIONS
FOR DR. MAYNARD TO
INFO@POST-POLIO.ORG.