

QUESTION: *I had polio as a child, which left me with a deformed left shoulder blade. In addition, my left lung was damaged, and my left arm has always been weak, though I do have full use of it. Within the past few years, I've developed difficulty swallowing and find that I have to eat more slowly and take my large medications by opening the capsules. Could this possibly be an effect of my polio?*



Marny Eulberg, MD

Answer from Marny Eulberg,

MD: Swallowing difficulties can be a result of weakness in the throat muscles caused by polio and is more common in people who had breathing muscles or upper extremity muscles affected by polio. Most often, in neuromuscular conditions, the swallowing problem is worse with thin liquids like water or juices, but it can also be for things like dry bread or pills.

However, swallowing problems can also be caused by other conditions that also happen in people as they age, even if they didn't have polio. In my experience with polio survivors that have swallowing problems, when they were tested, it turned out that about 40% of the time the problem was related to weakness of their throat muscles. The other 60% of the time it was caused by problems lower down in their esophagus, such as scarring in their esophagus causing a narrowing, a malfunction of the normal squeezing of the muscles in the esophagus that happens with aging called "presbyesophagus," or some kind of growth that was partially blocking the esophagus.

The best tests to determine the cause of your problems swallowing are either a fiberoptic endoscopic evaluation of swallow (FEES) or a modified barium swallow study (MBSS). Any medium-sized hospital that has speech therapists on staff should be able to do a modified barium swallow study. It is done in the X-ray department with both a speech therapist and a radiologist present. They watch as you swallow a thin liquid containing barium, then a thicker liquid with barium (like milkshake consistency), and finally, the barium mixed with something solid like crunched up cookies or mini marshmallows.

The speech therapist will be most interested in how the muscles of your tongue and throat work, and the radiologist will be most interested in your esophagus as it goes down into your chest and ultimately to your stomach. The speech therapist, in addition to trying to find the cause of your swallowing problem, can also tell you something to do that will make

swallowing easier and less likely to be a problem. They may also set you up with a series of exercises to help the muscles work better. The speech therapist does not need to have had a lot of experience with polio survivors because many people who have had a stroke also have swallowing problems, and there are enough people having strokes that the speech therapist will have developed expertise that can help you, too.

Emptying your capsules out and taking the powder either by itself or sprinkling on applesauce, jam or jelly, or ice cream is one way to deal with difficulty swallowing capsules. There are some medications—often having the initials LA, XR, etc., after their name—that should not be crushed or dumped out of the capsule because they need to remain intact until they get past your stomach and into the intestines. You might consult your physician or pharmacist about whether that is true for any of your medicines. Sometimes the medications that you take are also available as a liquid or chewable tablet (often when they are given to children) and you might be able to get your particular medication in a form that would be easier for you to swallow.

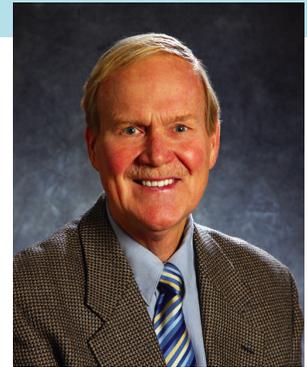
Additional remarks from Frederick Maynard,

MD: Your new difficulties with swallowing most certainly could be as a result of your polio history. Your description of left shoulder and lung involvement suggests a "bulbar polio" pattern of greatest involvement by the polio viral infection in your childhood. Later life swallowing problems are more common in polio survivors, especially those with shoulder and diaphragm involvement.

I would recommend evaluation by a speech/language pathologist who specializes in swallowing problems. You will need a radiographic test known as a "three-phase swallowing test" with an opaque dye done under a fluoroscope in a radiology department. It is ideal if the speech/language pathologist is present during the procedure in order to identify some of the best treatment recommendations to manage your symptoms and prevent complications. You can read some more about post-polio swallowing problems in PHI's *Handbook on the Late Effects of Poliomyelitis* at https://post-polio.org/late_effect_polio/swallowing/.

QUESTION: *Having contracted polio in 1949 at the age of two, my life growing up was physically challenging—a drop foot, leg length discrepancy, and limping my way through school. I lived a life of “no’s.” No sports. No dancing lessons. No nursing school. (“Too much walking.”)*

My current problem is constant pain in my Achilles tendon, shooting up through the calf. The joint and space connecting my hind hip to my leg is constantly in pain and cannot be ignored. X-rays show age-appropriate arthritis. I’m getting a new AFO in December because my leg has considerable atrophy. Besides resting and using pain creams, what recommendations do you have?



Frederick M. Maynard, MD

Answer from Frederick Maynard, MD: We are sorry to learn of your problematic pain. From your detailed description, I am concerned that your pain is “nerve pain” (referred to by doctors as “neurogenic pain”). Nerve pain is typically constant, often shooting, and hard to localize or provoke repeatedly in the same way. It could be coming from a pinched nerve in your back or the sciatic nerve in the medial buttock area. The first order of business would be to have an electrodiagnostic evaluation performed by a qualified doctor (AAEM-certified), typically a physiatrist or a neurologist.

If the test does not show any signs of nerve impingement or new nerve damage (beyond what would be expected because of your polio history), then it might be necessary to do more detailed tests on your tendons, muscles, and joints in the painful leg, including provocative maneuvers to produce the pain. Sometimes muscle tightness can lead to surprisingly severe pains. If your new AFO is comfortable and corrects the foot drop well but doesn’t reduce the leg pains, then I would say the pain is likely neurogenic. You will need a referral to have the electrodiagnostic tests (these are described in our *Handbook on the Late Effects of Poliomyelitis* at https://post-polio.org/late_effect_polio/electromyography/). ■

Have a medical question about the late effects of polio? PHI’s Medical Advisory Committee is here to assist. Just fill out the form at <https://post-polio.org/ask-the-doctor/>, and one of our volunteer physicians will be in touch. Please allow up to five business days for a response.

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