**Question:** About a year ago, I was diagnosed with Parkinson’s Disease (PD). Then recently, when providing medical history to a new eye doctor and reporting that I had polio as a child, I learned from him that he and a colleague authored a letter which was published in NEJM (New England Journal of Medicine) about polio and PD. My father also had PD. I learned from the medical record of my hospital admission for polio that the doctor documented my father had polio as a child with some residual in a leg. (I remember his misshapen foot and atrophied leg.) Although Dr. Raymond Roos at the University of Chicago Post-Polio Clinic did not diagnose PPS, I believe that I definitely have some of the late effects. Some of the PD symptoms are similar, as you may know. I am interested to know what experiences you may have had with others who have had a polio history and now PD. Is there a connection? There can’t be many folks who fit into the category.

**Answer:** There have been many cases of adults with a history of childhood polio developing PD. One of the first reports of this is in a 1978 NEJM article and may have been co-authored by the eye doctor you met! A relationship has long been observed between PD and a history of previous encephalitis due to several different types of viruses that may cause damage to the brain, particularly to the substantia nigra (SN) which is a small area of the brainstem that develops a deficiency of dopamine production in patients with PD and is thought responsible for most PD symptoms. Bodian documented polio virus damage to the SN in autopsy cases during the 1940s. More recently an MRI study on a child with acute wild polio in India documented changes in the SN. Therefore, it is certainly plausible that previous polio virus-caused encephalomyelitis can affect the SN and predispose it to later-life degenerative dysfunction resulting in PD. A 2010 epidemiologic report from Denmark actually documented a 2.3 times higher risk of developing PD among people with a history of polio compared to controls matched for age, gender and geographic location.

In light of these facts from the medical literature review of PD and polio that your question initiated, I think it is likely more than coincidental that you and your father both developed PD many years after having had childhood polio. I have personally seen a handful of patients with your two diagnoses, and I don’t recall any unusual problems they shared in common. Both conditions can benefit from individualized exercise programs to slow down symptom progression and from rehabilitation strategies to preserve and/or enhance functional capacities.