Bruno "Bytes"

Bits and Tidbits from Dr. Richard L. Bruno, HD., PhD.
from the Post-Polio Coffee House
April, 2018

Available through a "link" from Dr. Bruno's website: www.postpolioinfo.com
(or) directly through http://www.papolionetwork.org/bruno-bytes.html

On the topic of Sleeping Pills (4/23/2018)

Original Post: Is it safe for polio survivors to take sleeping pills?

Dr. Bruno's Response: To get to sleep, sometimes and only briefly, for example would be getting used to Bi-Pap. Medication to stay asleep? No. You need to know ***why*** you're not staying asleep; so you should talk to your physician about having a sleep study.

When muscle "twitching" is the culprit (see "Periodic leg movements in sleep" (PLMS), below) we have had success at the Post-Polio Institute with low doses of alprazolam.

On the topic of "Restless" Leg(s) (4/14/2018)

Original Post: For the last five years I have fought Restless Leg Syndrome. They started me on Gabapentin. It has not touched it and in fact it has gotten so much worse.

Dr. Bruno's Response: When polio survivors talk about having "restless legs" you have to make sure that they're talking about the right thing. There are two separate sleep disorders that are confused, not only by patients, but by sleep doctors themselves: "Restless leg syndrome" (RLS) and "Periodic leg movements in sleep" (PLMS)…

- Restless leg syndrome is when people have creeping sensations in their legs and feel that ***they*** must move their legs.
- Periodic leg movements in sleep are when the leg muscles twitch and jerk on their own.

In the Post-Polio Library (at postpolioinfo.com) you can find our articles on periodic leg movements in sleep, which we call Generalized Random Myoclonus, since in polio survivors muscles can twitch and jump, not just in the legs, but in the arms, hands, chest and abdomen.

We found that the treatment for muscles twitching and jumping is a low dose of alprazolam 30 minutes before sleep. And in spite of what your doctor might say, alprazolam is ***not*** addictive because its anti-anxiety effect occurs when you're asleep! Polio survivors do ***not*** need more Xanax after an effective dose if found. Post-Polio Institute patients have been on the same Xanax dose to treat muscle twitching for decades!

Sleep doctors will often try to give you dopamine stimulating drugs like Mirapex for both PLMS and restless legs. Polio survivors should never take anything that either stimulates or blocks dopamine receptors in the brain because the dopamine system was severely damaged by the poliovirus and dopamine receptors on neurons either multiply and turn up their sensitivity, or hide and turn down their sensitivity, depending on the medication that is given. These drugs can cause marked fatigue and a permanent Parkinson's-like tremor.

Talk to your doctor or sleep specialist about the difference between RLS and PLMS and how to treat these conditions in a polio survivor.

Bottom line: Polio survivors should never mess with dopamine in the brain!

On the topic of Applying Successfully for Social Security (4/17/2018)

Original Post: What is the protocol for Polio survivors applying for Social Security Disability?

Dr. Bruno's Response: Go to postpolioinfo.com and click on Social Security. Our entire protocol on how to get Social Security the first time or win an appeal is there with the 2003 Social Security Ruling for Post-Polio Sequelae. http://www.postpolioinfo.com/ssdisability2.php

On the topic of Depression (4/23/2018)

Original Post: I have been depressed for years. I've been on antidepressants for more than 20 years. I find that I am at a breaking point. I'm tired and very discouraged. Is anyone taking meds that make their mind feel right again? Does the brain lose its neurons like the rest of our body and cause depression?

Dr. Bruno's Response: Brain neurons die with the polio infection but we don't have evidence they die with PPS. However brain neurons do "brown out" and work less well in polio survivors, especially the neurons that are supposed to activate the brain. David Bodian's research in the 1940s and our research answers questions about the effects of losing brain neurons can be found either in the Post-Polio Library or here: Post-Polio Brain Fatigue.

For depression that's not responding to drugs or if you're having major side effects, you need to see a psychopharmacologist not your local psychiatrist. Going to a major medical center would be a good idea.

On the topic of Polio Survivors Using Statins (4/17/2018)

Original Post: Isn't it true that no polio survivor should ever take statins?

Dr. Bruno's Response: No! Many polio survivors have absolutely no difficulty with statins, no muscle pain and certainly no muscle breakdown. The enzyme CK should be measured before statins are begun to make sure that damage is not being done to the muscle if muscle pain occurs.

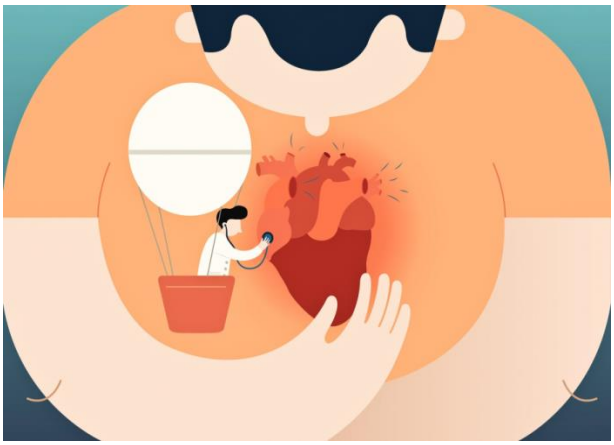
Weighing the Pros and Cons of Statins

By JANE E. BRODY APRIL 16, 2018

The New York Times

Are you among the 73 million Americans with cholesterol levels that current guidelines suggest should be lowered by taking a statin for the sake of your cardiovascular well-being? Have you and your doctor discussed the pros and cons of statin therapy and whether it is appropriate for your circumstances?

If not, now is the time to do so. Too often, patients are given a prescription with little or no discussion of what the drug can mean for their health, and that affects their willingness to take it or stay on it.



Dr. Seth Martin, a preventive cardiologist at Johns Hopkins Hospital, strongly recommends that taking a statin be a fact-based, collaborative and personalized decision between doctor and patient, following one or more discussions of the individual's medical and personal concerns.

Maybe you've already been prescribed a statin and are among the 45 percent of such patients who never took the medication or who abandoned it within six months, perhaps because you've heard scary stories about possible side effects.

The Complete Article from the New York Times is HERE:

In addition, you can read this article is from the Post-Polio Library HERE

On the topic of Salk or Sabin Vaccine Antibodies Being Passed from Mother to Child (4/26/2018)

Original Post: Do either the Salk or Sabin vaccines pass polio immunity to offspring? Can the oral vaccine actually cause polio?

Dr. Bruno's Response: Mothers transfer antibodies *in utero* (however they are created, naturally or by vaccination), to their infants. They remain protecting the child for about 6 months.

The oral vaccine (OPV) can mutate once in several million doses and can do so in a child's feces, giving a polio infection to the young child or two the unvaccinated person changing the diaper. This is a very rare occurrence but is the reason the oral vaccine was discontinued in the United States in 1979.

For those who are interested here is some in-depth information:

Maternal Antibodies: Clinical Significance, Mechanism of Interference with Immune Responses, and Possible Vaccination Strategies

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4165321/

On the topic of "Fake News" and Vaccines (4/26/2018)

Original Post: Did the Polio Vaccine Cause Cancer?

Dr. Bruno's Response: Vaccines are a topic that is rife with "fake" news on the Internet. www.factcheck.org is an excellent source for verification or "debunking" false information:

Did the Polio Vaccine Cause Cancer?

https://www.factcheck.org/2018/04/did-the-polio-vaccine-cause-cancer/

By Vanessa Schipani

Posted on April 24, 2018

FULL QUESTION

Were people infected with cancer through the polio vaccine?

FULL ANSWER

Many of our readers have asked us whether people have developed cancer because they received the polio vaccine. Facebook users also have flagged stories on this topic as potentially false. The bottom line: It's highly unlikely that the lots of polio vaccine contaminated in the '50s and '60s have caused anyone to develop cancer.

Polio, or poliomyelitis, is a disease caused by the poliovirus. About 1 in 200 people who contract the virus develop the disease, which involves loss of movement in the limbs, explains the Centers for Disease Control and Prevention.

Nearly 3 out of 4 people who catch the virus have no symptoms. About 1 in 4 experience less severe symptoms, such as a sore throat, tiredness, nausea or fever. In rare cases, the virus can cause death. Immobility can also occur decades after a person seems to recover from the infection, says the CDC. Experts classify this as an illness different from polio, namely post-polio syndrome. Between 25 percent and 40 percent of "polio survivors" develop this syndrome.

In 1954 — the year before the polio vaccine became widely available — the U.S. saw more than 18,000 reported cases of paralytic polio and more than 1,000 deaths due to the virus, according to the CDC. By 1964, those numbers had dropped to 106 and 17, respectively. Because of the vaccine, the U.S. has been virtually "polio-free" for 30 years, says the CDC, though "the disease still occurs in other parts of the world." The agency still recommends that children get four doses of the polio vaccine, each of which increases immunity to the virus. In 2016, 93.7 percent of children under 3 years old had received at least three doses of the vaccine. The CDC says children should get the fourth dose between the ages of 4 and 6.

To develop the vaccine, the epidemiologist and physician Jonas Salk, who died in 1995, grew the poliovirus in a culture (think, petri dish) of monkey kidney cells. He then used a chemical called formalin to kill the virus, rendering it unable to cause polio. When this dead virus is introduced into people's bodies, it teaches their immune systems how to build up defenses against the virus. In this way, the polio vaccine, like other vaccines, shows the body how to develop the tools it needs to fight off the live virus, if exposed to it.

But in the early years of the vaccine's administration, two unexpected issues occurred. In 1955, some lots of the vaccine produced by one company actually contained live poliovirus, explains the CDC. This led to more than 250 cases of the disease polio and 10 deaths.

The second incident pertains to our readers' questions. In 1960, scientists discovered that some of the monkey kidney cells used to make the polio vaccines were contaminated with simian virus 40. For monkeys, this virus is harmless, producing no symptoms. But in high doses, SV40 can cause cancer in rodents.

Starting in 1961, authorities required new lots of polio vaccines to be free of SV40. Still, many vaccines produced prior to this year weren't recalled. Altogether, scientists estimate that around 100 million U.S. residents received one or more doses of the polio vaccine between 1954 and 1963, including those who were vaccinated during a clinical trial in 1954.

To be clear, not all of the vaccines given to people during this period were contaminated with SV40. Out of those that were, the formalin used to kill the poliovirus killed all or most of the SV40 as well, explained Keerti Shah, now a professor emeritus of molecular microbiology and immunology at Johns Hopkins University, in a 2006 review. (continued…)

Published in the International Journal of Cancer, the review adds that the number of people truly at risk — those exposed to live SV40 remains unknown.

Research on SV40

Since the 1960s, scientists have continued to research the relationship between the polio virus, SV40 and cancer.

In 2002, a committee at the National Academies' Institute of Medicine (now the National Academy of Medicine) reviewed the available research on the subject and found "that the evidence was inadequate to conclude whether or not the contaminated polio vaccine caused cancer." Why did the committee make that decision?

Studies had consistently shown that people who received the polio vaccine in the 1950s and 1960s had no increased risk of cancer, but these studies had "substantial limitations," the committee said. For example, these studies were "ecologic," the report explained. Ecologic studies look at groups — in this case, people who received the polio vaccine in the 1950s and 1960s — not individuals.

If the polio vaccine contaminated with SV40 did cause cancer, scientists would expect to see an increased risk of cancer in the population of people who received the vaccine. But just because they didn't find this effect in the group doesn't rule out the possibility that some select individuals did develop cancer because of the vaccine.

Given the inconclusiveness of this research, the committee looked at other lines of evidence to elucidate whether SV40 can cause cancer in humans. For example, the committee found that studies have shown that the virus can cause cancer in rodents. But just because a virus causes cancer in lab rodents doesn't mean it can cause cancer in humans. How viruses affect one species is not necessarily how they affect others.

The committee also found that studies have shown that SV40 can "transform" human cells in a culture — that is, cells in a petri dish, not in the body. This means the virus can change genetic material within human cells, a process that's necessary for a person to develop cancer from the virus. But this is still not enough evidence to definitively say SV40 causes cancer in humans — how a virus affects cells outside of the body may not be how it affects cells within the human body.

The report also pointed to some studies that have found the genetic material of SV40 within human tumors. But again, the "detection of SV40 in tumors does not, by itself, demonstrate a causal relationship," the report explained. "SV40 could be a passenger virus, infecting the cells but causing no pathology."

The National Academies' report concluded that — even if researchers do uncover conclusive evidence for a causal link between the polio vaccine and cancer in the future — evidence accumulated up to 2002 is "sufficiently robust to suggest that the relative contribution of SV40 to overall risk would have to be small."

Research published since 2002 has only swayed the scientific pendulum toward a lack of a causal link, says Shah at Johns Hopkins. In his 2006 review of the literature, Shah concluded that research published since the 2002 committee's report "does not support the notion that SV40 contributed to the development of human cancers."

For one, studies that found the genetic material of SV40 in human tumors were likely "false positives," he wrote in his paper published in the International Journal of Cancer. Shah also pointed out that four additional studies published since 2002 found no link between those who may have been exposed to SV40 via the polio vaccine and a higher prevalence of cancer.

Like the 2002 report, Shah said that "these data by themselves do not disprove the role of SV40 in human cancer because the exposure to SV40 by the vaccine is not known at the level of the individual." But given this more recent research, it's "very likely that SV40" is "not linked to any human cancer," he concluded.

As we pointed out last July when we wrote about a controversial European Union court decision about vaccines, it's difficult, if not impossible, for scientists to definitively rule out that a vaccine causes a disease. We cited a 2012 report by the Institute of Medicine at the National Academies on vaccine safety to support that point. The report states that it's "virtually impossible to prove the absence of a relationship with the same certainty that is possible in establishing the presence of one." Why? Because "studies may not rule out the possibility that the reaction is caused by vaccine in a subset of individuals," the report explains.

This argument also applies to the case of the polio vaccine and cancer — evidence suggests the contaminated vaccine in the 1950s and 1960s doesn't cause cancer, but it's difficult for scientists to rule out the possibility that it may have done so in a handful of people.

On the topic of Increasing Physical Therapy (4/27/2018)

Original Post: My physiotherapist has decided I need to build up my exercises, so she wants me to increase the exercises I've been doing even though I find them quite tiring. I'm happy to do them if they will benefit me, I'm concerned that if I do as she ask that I may regret it in the future. I'm also concerned that Medicare won't cover more physical therapy if I don't get better.

Dr. Bruno's Response: According to Post-Polio Institute protocol, stop ***before*** you feel anything: tired, pain, muscles shaking. If you are currently exercising to a point of fatigue, stop the exercise and talk to your rehabilitation physician (who prescribed the PT originally) and find out if the doctor or physical therapist knows anything about treating polio survivors.

As for Medicare coverage of physical therapy, the law has changed. Medicare must allow PT not only for to increase strength but also to manage pain and ***maintain function*** in those with chronic disabilities.

On the topic of "Loss" of Motor Neurons (Anterior "Horn Cells") (4/30/2018)

Original Post: Do people with PPS lose "Horn" cells at the same rate as someone with out PPS?

Dr. Bruno's Response: Alan McComas found that ***untreated*** polio survivors lost 7% of their remaining motor neurons (spinal cord anterior "horn cells") ***each year*** as he watched them become weaker. An "untreated" polio survivor was someone in his study who was not receiving treatment for PPS, following the "Conserve to Preserve" protocol or using appropriate assistive devices.

So at best progressively weaker polio survivors started with 60% of there motor neurons and, with overuse-abuse, go down to 56% then 52% then... Non-polio survivors lose about 1% of their motor neurons/year only when they reach 60 years old. But non-polio survivors started with 100% of their anterior horn cells so they have a lot more to lose before a weakness is seen!

On the topic of Aortic Stenosis (4/27/2018)

Original Post: Anything special a polio survivor should know if they have been diagnosed with aortic stenosis? I have syncope (fainting), which is neuro vasovagal and polio affects the vagus nerve.

Dr. Bruno's Response: I'm sorry about the stenosis! Fainting isn't always neuro vasovagal, due to polio affecting the vagus nerve. Aortic stenosis can reduce heart output and itself cause fainting and have nothing to do with polio. Talk to your cardiologist about the cause of your fainting.

Remember: Don't assume that every symptom or illness is a result of polio.

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http://www.papolionetwork.org/bruno-bytes.html
Scroll down the page (through the Current Month posts).
Previous months are located there, and are available by "clicking" on them, in easily printable PDF format
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