On the topic of Post-Polio Sequelae “What is it ?”  (2/5/2017)
Original Post: The medical world seems to use the word “syndrome” when more definitive term or diagnosis is not available. I remember that early on our problem was often referred to as Post-Polio Syndrome. When I fill out forms at doctors’ offices or speak with physicians I refer to Post-Polio Sequelae.
Dr. Bruno’s Response: Post-Polio Sequelae is the overreaching name that covers all of the symptoms that could develop in a polio survivor later in life, including "post-polio syndrome muscle weakness", and is the term that I used in writing the Social Security ruling that allows polio survivors to receive SSDI (HERE).

On the topic of PPS in the United Kingdom  (2/7/2017)
Dr. Bruno’s Original Post: A conversation about PPS in the House of Commons

On the topic of an EMG being able to “diagnose” PPS  (2/8/2017)
Original Post: I had an interesting appt with my new neurologist recently. After reviewing my file, including prior MRIs and EMGs, he did a thorough physical exam, having me walk and do certain movements, checking my reflexes, doing a force test on all my limbs (i.e., pushing back against his hands), balance tests, staring intently at the back of my thighs (looking for twitching, I think). Finally, he says he's skeptical that I have PPS. Has anyone else had this experience? He has scheduled me for a new EMG.
Dr. Bruno’s Response: There are no tests to diagnose PPS but there are tests to rule out all of the causes for your symptoms. It is possible to have an EMG to see if you had polio. But at least 10% of the EMGs in paralytic polio survivors are negative even when the needle is placed in a muscle that was known to be paralyzed and is atrophied.

On the topic of Chest Congestion  (2/21/2017)
Original Post: Does anyone have experience with using a nebulizer for chest congestion? My husband (who has PPS) has scoliosis and because of muscle weakness cannot cough very productively; he cannot cough up the mucous in his chest. The doctor wasn’t specific about what to get.
Dr. Bruno’s Response: There are outstanding devices that literally suck the mucus out of someone's lungs. One is – In-Exsufflator
Additional Post: I like the Cough Assist. It is wonderful, small and portable. It not only clears the secretions but also expands your lungs to make them more pliable or they become non-pliable with shallow breathing.
Dr. Bruno’s Response: These are options that are available. Ask your doctor to guide you.

On the topic of “Sprains, Strains and Tears”  (2/27/2017)
Dr. Bruno’s Original Post: I’m offering this article for information only. It is not intended for treatment. If you experience any of these symptoms? Please seek help from your PPS knowledgeable physician.
The Differences Between a Sprain, Strain and Tear

Know how they are caused, treated and prevented

Newswise — For many, the start of a new year means the start of a new workout regimen. It is difficult enough to make the time commitment, but nothing throws off a resolution like an injury. Martin Mufich, MSN, RN, sports massage therapist and clinical assistant professor at the Texas A&M College of Nursing, offered some tips to better recognize and prevent common workout injuries. Still, he warned that you should not self-diagnose. “See a health care provider to be sure about the type of harm that may have occurred, especially if improvements are not seen within 24 hours,” Mufich recommended.

Sprain: Ligament injury
  Have you ever been running through the grass then all of a sudden your foot lands on uneven ground, and you feel your ankle wrench followed by a jolt of pain? It is likely that your ankle is sprained, or twisted.
  A sprain involves the overstretching or tearing of the ligaments, which are the fibrous connective tissues that connect bones to each other and stabilize them. “Sprains occur when the joint is forced into an unnatural position,” Mufich said. “They happen most often in the ankle but can occur at any joint, such as the wrist or knee.” Ligament injuries on the outside ankle occur when the ankle turns outward and the foot twists inward. On the other hand, inner-ankle sprains, which are less common than those on the outside of the ankle, result from the ankle rocking inward and the foot turning outward.
  Joint or muscle pain, inflammation, hampered movement, tenderness and bruising are symptoms of a sprain. The severity of the sprain can range from mild to serious. A tweak of the ankle could result in an overstretched ligament that becomes tender, swollen and stiff, but the ankle should still be stable enough to support the weight of walking. “A mild sprain should take approximately seven to 10 days to heal,” Mufich said. “A torn ligament is considered a severe sprain that will cause pain, inflammation, bruising and result in ankle instability, often making it difficult and painful to walk. Recovery from a torn ligament may take several weeks, and should be done under the supervision of a health care provider.”

Strain: Muscle or tendon injury
  A strain is the overstretching or tearing of a muscle or tendon, which are the fibers that connect the muscles to the bones. They can occur from a single incident or from repetitive movements over the long term. “An acute strain is an instantaneous stretch or tear of the muscle or tendon;” Mufich said, “whereas, a chronic strain stems from repetitive motions over time that place stress on the muscle or tendon.”
  Muscle spasms, weakness, cramping and immobility, as well as pain, bruising and swelling are symptomatic of a strain. Like sprains, strains vary in severity. It could take a few weeks for the symptoms of a mild-to-moderate strain to subside.

Tear: Ligament, muscle or tendon injury
  Tears are the ripping of fibrous tissue that can occur in the ligaments, muscles or tendons from similar activities that cause fibers to overstretch, but the diagnosis is more serious and muscle and tendon tears could take multiple months to heal. “Typically, the worse a tear, the more inflammation and pain a person will experience, and the longer it will take

http://www.papolionetwork.org/bruno-bytes.html
for the injury to heal," Mufich said. Non-surgical rehabilitation is often sufficient. However, some tears may require surgery to repair, such as those to the anterior cruciate ligament, or ACL.

**Treatment and Prevention**

Treating sprains, strains and tears consists of taking steps to reduce the swelling and pain from the injury. Swelling is often the body's first reaction for healing an injury. As fluid and white blood cells rush to the damaged tissue, it becomes inflamed in an effort to repair the tissue and protect it from further damage. However, the fluid can compress the nerves in the injured area and cause pain. Excessive swelling can also potentially lessen the ligaments’, tendons’ and muscles’ flexibility, making the area more susceptible to future injuries. Mufich said these injuries are generally treated by following the plan “RICES.”

**Rest:** Unpainful movements of the area is important, but avoid putting weight on the injury for a prolonged time, perhaps by using crutches, until it is less painful to use

**Ice:** Apply ice, not heat, to the affected area for 10 to 20 minutes every hour or two throughout the first 24 to 72 hours or until the swelling subsides

**Compression:** Wear an elastic compression wrap for the first 24 to 36 hours to help minimize any swelling

**Elevation:** Rest the injury above heart level for two to three hours per day to reduce the amount of swelling that collects in the body’s extremities

**Stabilization:** Especially if medical care is not readily available, like in the wilderness, stabilize the injured area until care becomes available

"Particularly for muscle injuries, the blood works to lay collagen layers on the injury to heal it by forming an internal scab,” Mufich said, “and hopefully overtime, as the muscles fibers heal, that collagen will break down.” Ligaments and tendons do not receive as much blood flow, so they tend to take longer to heal.

It is important to ease back into mobilizing the area and remain patient throughout the recovery process until your body is ready to return to pre-injury activities. Some discomfort throughout the healing process is normal. However, there should not be any sharp pain. A health care provider can recommend proper rehabilitation practices and exercise.

Sprain, strains and tears can generally be prevented by adequately warming up and stretching prior to rigorous activity, wearing protective equipment, wearing proper fitting shoes that provide stability and building and maintaining muscle and joint strength by exercising regularly.

“While it is great to push your limits, know your limits,” Mufich said. “If you are not seeing improvements within 24 hours or it is getting worse, contact a health care provider.”

— By Nicole Bender

Additional Bruno “Bytes” are available for you to share by going to:  
[http://www.papolionetwork.org/bruno-bytes.html](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.