On the topic of Physical Therapy  (6/13/2017)
Original Post: I am 45 years old. Polio affected mainly both my legs and my left arm (I use braces and a manual wheelchair).
There is a short story in the Polio Paradox book about a young blacksmith who used his right arm almost exclusively to work and live. His arm began to feel really heavy, and seemed to be losing function. DR’s originally attributed this to overuse of one extremity.
That seems to be my story right now. The past years I have been waking up feeling like my right arm has been working out all night long while I was sleeping. It started off slow, and tolerable. Today it is a cause of much pain, anxiety, and fatigue for me.
The doctor sent me to a physical therapist. The therapist has me on a “light” workout of my right arm on a daily basis (3 times a day). The “light” workout is just making things worse.
I was feeling some guilt for not forcing the workouts the physical therapists suggested. It's really hard for me to break that mindset that Pain equals Gain.
Additional Post: I have a night time ‘heavy arm' and the pain is usually worse at night and first thing in the morning. Sometimes I cannot get out of bed.
Dr. Bruno’s Response: A night-time painful "heavy arm" needs its cause to be determined.
When pain is worse at night it could very well be a pinched nerve in the neck. Some physical and occupational therapy for bed positioning could be helpful.
You’re still using a manual wheelchair – time to “power up”!
Find a Rehabilitation doc.
PPS is always a diagnosis of exclusion.

Remember: if something you do hurts, either don't do it or do a lot less of it.
Here’s an article from an experienced, PPS Physical Therapist who was with our Clinic treating Polio Survivors for more than ten years. Physical Therapy and PPS by Shanti (Chacko) Moloyal

On the topic of Balance  (6/14/2017)
Original Post: For the last year I have been losing balance when I walk with my brace and crutches. Why?
Additional Post: My balance is not good when walking, turning, twisting or, backing up. I must be careful as these activities can cause me to fall. It has slowly gotten worse. I now walk with cane but I often need a walker. My doctors don't know what to say, and have suggested that I have MS, or they say the balance and weakness is caused by my Polio leg being smaller and weaker.
Dr. Bruno's Response: Balance is the key word. If you're stronger on one side of your body than the other, you're out of "balance" and headed for a fall.
If you're walking on your arms with crutches and your arms get weaker you won't be able to hold yourself up. Also, the importance of hip muscles in keeping you from falling is often overlooked by polio survivors and their physical therapists.
If a part of your body doesn't move (as with a spinal fusion) you can't compensate for a misstep by twisting just a little and down you go like a tree.
If you're a polio survivor, you don't need to have MS or some other condition to be out of balance. Every polio survivor will have a different set of weaknesses and strengths that need to be evaluated by a physical therapist to help find out what's causing you to be "unbalanced". Then they can recommend assistive devices (e.g., rolling walker, rolling chair).

**On the topic of Positive Thinking and Pain** (6/19/2017)

**Dr. Bruno’s Original Post:** I often say "Keep a good thought." Seems "good thoughts" are a way to treat pain: Women Who Focus Negatively and Catastrophize Pain Magnify Chronic Pain, More Likely to Be Taking Prescribed Opioids.

  [Pain catastrophizing is the tendency to describe a pain experience in more exaggerated terms than the average person (e.g., "My pain is horrible, terrible!"), constantly focus on pain and/or to feel more helpless ("My pain will never get better!").]

  It's about how you think about pain. One clue: If you refer to "my pain" instead of "the pain" you may need to refocus as Nelly says, on the emotional, spiritual, sociological and psychological issues.

![Women Who Focus Negatively, Magnify Chronic Pain, More Likely to Be Taking Prescribed Opioids](image)

Newswise — CHICAGO – Female chronic pain sufferers who catastrophize, a psychological condition in which pain is exaggerated or irrationally focused on, not only report greater pain intensity, but are more likely to be taking prescribed opioids than men with the same condition, according to a study published Online First in Anesthesiology, the peer-reviewed medical journal of the American Society of Anesthesiologists (ASA).

“Research underscores how psychological factors such as negative thoughts or emotions have the capacity to influence how we experience pain and the likelihood that someone will be taking prescribed opioids,” said Beth Darnall, Ph.D., study co-author and clinical associate professor, Department of Anesthesiology, Perioperative and Pain Medicine at Stanford University School of Medicine, Palo Alto, California. “The findings suggest that pain intensity and catastrophizing contribute to different patterns of opioid prescribing for male and female patients, highlighting a potential need for examination and intervention in future studies.”

Pain catastrophizing has been shown to have a powerful influence on patients’ sensory perception, and may explain up to 20 percent of the variance in chronic pain intensity seen, with people who catastrophize experiencing greater pain intensity. This can ultimately influence pain treatment.

In a retrospective study, clinical data from nearly 1,800 adult chronic pain patients was examined. All patients sought initial evaluation at a large outpatient pain treatment center between January 2014 and April 2015. Patient and non-patient reported data, such as average pain intensity, pain catastrophizing scale, sex, etc., was collected through Stanford’s Pain Collaborative Health Outcomes Information Registry (CHOIR). Patients self-reported all current opioid prescription data either through CHOIR or verbally to clinic staff. Researchers used the data to characterize relationships between pain intensity, pain catastrophizing and opioid prescriptions – and to understand differences between these variables in men and women.

The study found that most patients examined (57 percent) were prescribed at least one opioid medication. For women, pain catastrophizing was more strongly associated with having an opioid prescription, and this pattern emerged in women with even relatively low levels of pain catastrophizing. Pain catastrophizing was the strongest predictor of prescribed opioids in women, while pain intensity was a stronger predictor of opioid prescription in men.

“Our findings show that even relatively low levels of negative cognitive and emotional responses to pain may have a great impact on opioid prescribing in women,” said Yasamin Sharifzadeh, B.S., study lead author and second-year medical student at Virginia Commonwealth University, Richmond, Virginia. “We hope to study whether early treatment for pain catastrophizing may reduce opioid prescriptions for both sexes, particularly for women. As the impact of chronic pain grows, it is vital that we understand the nuances of how it affects different populations and how to best intervene.”

Bruno Bytes – June, 2017  
[http://www.papolionetwork.org/bruno-bytes.html](http://www.papolionetwork.org/bruno-bytes.html)
The authors note that while replication of their results is needed, the findings suggest several important points:
First, clinicians should treat pain catastrophizing at low levels and as early as possible.
Second, the study adds to the existing evidence that the consequences of pain catastrophizing may be greater for women, so they are a particularly important target group for treatment.
Third, more research is needed to understand sex differences in pain so clinicians can develop better treatments for both men and women.

http://www.newswise.com/articles/view/676475/?sc=mwhn
https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2696024/

On the topic of sibling having a “mild” case of Polio (6/20/2017)
Original Post: My husband has PPS. At the age of 18 months, his older sister had a cold, he got her cold. She had arm pain and tingling that went away. He got Polio and spent over a year in hospital. Later they felt that the "cold" was a mild case of polio. She has been extremely active entire life. She has many aches and pains and for the past year, arm, hip, leg weakness. The physician(s) are having trouble pinpointing a diagnosis. Is it possible for her to have PPS? It’s so hard to see this very active woman using a walker.
Additional Post: I had a stiff neck, a doctor's home visit, and stayed in bed for an unknown amount of time before regaining my mobility by crawling on all fours. My parents never spoke directly about it. I was shocked to hear that Mom had told my wife my legs had been paralyzed for a short time. Sadly, parents secrets about that period was not that unusual.
Dr. Bruno’s Response: "On average, if one child in a household became ill, he “shared” polio with one other sibling of similar age. (I say “he” because more boys contracted polio than did girls.) Just over half of those who became ill were paralyzed, while the others had flu-like symptoms ranging from a fever, sore throat, and nausea to a stiff neck and muscle pain. Such a “minor illness” was caused by the poliovirus but may never have been diagnosed as polio at all, or may have been called “abortive” or “nonparalytic” polio. In three-quarters of households the first case of polio was paralytic and the second “nonparalytic.” The bottom line: There’s about a one-in-five chance that if you had paralytic polio, one of your brothers or sisters had “nonparalytic” polio—and may not even have known it.
Polio was the shameful, frightening "AIDS" of the 1940s-50s (except the poliovirus was easy to transmit).

On the topic of Steroids and Pain Control for Polio Survivors (6/25/2017)
Original Post: Some time ago I was put onto Prednisone for pain control. Some of the pain came back. Especially stiffness in legs, arms, shoulder, hands and lower back.
Additional Post: I've been on a regime of prednisone for over a week now to recover from bronchitis and it's been kicking my backside since last night. Winding down the dosage and not feeling my best has caused nausea, jittery body and all over body weirdness.
Dr. Bruno’s Response: Prednisone should never be taken by polio survivors to treat pain due to inflammation for more than a week. Prednisone blocks neurons' ability to take in blood sugars, which are neurons only “fuel.” Polio survivors don't need to make their poliovirus-damaged neurons less functional by starving them of their fuel supply.

On the topic of Back Pain and Brace Adjustments (6/27/2017)
Original Post: I have been having back problems. Today I saw my brace maker and he noticed my hips were uneven and put a small lift in my shoe with the KAFO and unbelievable how much better my back feels. I am so happy the small fix makes me feel so much better.
Dr. Bruno’s Response: Well done. Enough said!
On the topic of Anxiety or Depression masking a true Medical Problem  (6/27/2017)

Dr. Bruno’s Original Post: BODY or BRAIN? YES!

Ruling out other conditions must be considered... "...it may be up to patients themselves or their advocates to suggest to therapists that something other than an emotional problem may be responsible for psychiatric disturbances..."

It's perfectly normal for someone to feel anxious or depressed after receiving a diagnosis of a serious illness. But what if the reverse occurs and symptoms of anxiety or depression masquerade as an as-yet undiagnosed physical disorder?

Or what if someone’s physical symptoms stem from a psychological problem? How long might it take before the true cause of the symptoms is uncovered and proper treatment begun?

Psychiatric Times, a medical publication seen by some 50,000 psychiatrists each month, recently published a “partial listing” of 47 medical illnesses, ranging from cardiac arrhythmias to pancreatic cancer, that may first present as anxiety. Added to that was another “partial listing” of 30 categories of medications that may cause anxiety, including antidepressants like selective serotonin reuptake inhibitors, or S.S.R.I.s.

These lists were included in an article called "Managing Anxiety in the Medically Ill," meant to alert mental health practitioners to the possibility that some patients seeking treatment for anxiety or depression may have an underlying medical condition that must be addressed before any emotional symptoms are likely to resolve.

Doctors who treat ailments like cardiac, endocrine or intestinal disorders would do well to read this article as well lest they do patients a serious disservice by not recognizing an emotional cause of physical symptoms or addressing the emotional components of a physical disease.

For example, Dr. Yu Dong, a psychiatrist at Inova Fairfax Hospital in Virginia, and colleagues pointed out last month that patients with respiratory conditions like asthma, sleep apnea or pulmonary embolism could present with symptoms of anxiety, or those with cardiac symptoms like chest pain or rapid heartbeat could have an anxiety disorder.

The problem of missing the proper diagnosis grows out of a long-ago separation of powers within the medical profession that often limits the ability of practitioners to see the forest for the trees, as it were. Medical doctors like cardiologists or gastro-enterologists are often ill-equipped to recognize and treat emotional symptoms related to a physical ailment, and psychiatrists may not consider the possibility that a patient with symptoms like palpitations, fatigue or dizziness really has a physical ailment.

Indeed, doctors at the Montreal Heart Institute reported in 1996 that about a quarter of 441 patients who came to the emergency room because of chest pain were in fact suffering from panic disorder, not a heart ailment. On the other hand, a woman I know who was being treated for panic attacks turned out to have a cardiac abnormality, and once that was corrected, her panic attacks disappeared.

Furthermore, anxiety is often overlooked as the source of disorders like substance abuse or addiction, or as a contributing factor to symptoms in conditions like migraine headache or irritable bowel syndrome.

The Mayo Clinic lists several factors that suggest the possibility that anxiety may result from an underlying medical disorder:

- None of your blood relatives has an anxiety disorder.

- You didn’t have an anxiety disorder as a child.

- You developed anxiety seemingly out of the blue.

- You don’t avoid certain things or situations because of anxiety.

Persistent anxiety can cause symptoms like dizziness, nausea, diarrhea and frequent urination. People suffering from anxiety disorders can develop an array of additional physical symptoms as well, like muscle pain, fatigue, headaches and shortness of breath. 

http://www.papolionetwork.org/bruno-bytes.html
breath, which can lead to all manner of costly tests in a futile search for a physical cause. Yet nearly a third of people with an anxiety disorder are never treated for it.

The problem affects children as well. Anxiety disorders in children may be expressed as recurrent stomachaches or sleep disorders, including frequent nightmares and teeth grinding.

When people have a chronic physical illness, untreated anxiety can make the symptoms worse and the disorder more difficult to treat. Among patients with chronic obstructive pulmonary disease, for example, untreated anxiety can result in more frequent hospitalizations and more severe breathing difficulties. And those with physical ailments and untreated anxiety are also more likely to die sooner.

Anyone with a chronic ailment who experiences symptoms common to anxiety might consider being checked out for this emotional component and getting treatment, if needed. There are several effective therapeutic approaches for anxiety, including cognitive-behavioral therapy and medication that can result in a much improved quality of life.

Depression, too, can be an early sign of an underlying medical condition not yet recognized. Among conditions in which this has occurred are thyroid disease, heart attack, cancers of the lung and pancreas, and the adrenal disorder Cushing’s disease.

In a report in the journal Psychotherapy and Psychodynamics, researchers from Italy and Buffalo, pointed out that a neurological disorder like multiple sclerosis or Parkinson’s disease may first show up as a psychiatric problem years before neurological symptoms become apparent that result in a correct diagnosis. They cited a study of 30 patients with multiple sclerosis at the University of Massachusetts Medical School, three-fourths of whom experienced a delay in diagnosis because they had symptoms of major depression.

“Physicians may not pursue medical work-up of cases that appear to be psychiatric in nature,” the team wrote. “They should be alerted that disturbances in mood, anxiety and irritability may antedate the appearance of a medical disorder.”

Thus, it may be up to patients themselves or their advocates to suggest to therapists that something other than an emotional problem may be responsible for psychiatric disturbances that don’t respond to standard psychiatric remedies.

Keep in mind that human beings are not divided into two different organisms: a physical one and an emotional one. Mind and body are a single construct with two-way communication, and what happens in the body below the head can — and often does — affect the brain and vice versa.

Medical practice has been slow to catch up with what was demonstrated by healers long before the advent of modern medical science. Although these healers may have had nothing to administer more potent than a placebo, they could sometimes successfully treat the body through the mind. Their patients expected the treatment to work, and so it often did.

Nowadays, when researchers study the effectiveness of a new treatment, they routinely include a control group that acts as a placebo to help determine the benefits of the remedy in question over and above those induced by a patient’s belief that the new remedy will work.


On the topic of Questioning Prescription Drug Prices (6/30/2017)

Dr. Bruno’s Original Post: Another reminder for Polio Survivors to be their own accountants and question medication prices! An outstanding video from the University of Michigan Poll Finds - Older Americans Don’t Get – or Seek – Enough Help From Doctors & Pharmacists on Drug Costs.

Results from the new National Poll on Healthy Aging reveals opportunities for patients to speak up, professionals to aid more

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