

## *How to Prevent Further Disability in Polio Survivors*

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The thought of becoming increasingly disabled as aging progresses is something that we all fear. For polio survivors, particularly those who are experiencing symptoms of Post-Polio Syndrome (PPS), the fear of not knowing what the future will bring may be overwhelming. Although it is important to treat the symptoms of PPS, there are many other reasons why polio survivors may become further disabled. This article addresses 3 major reasons why polio survivors may experience further disability as they age, and how to prevent this from occurring.

### 1. Systematically addressing and treating all potentially serious medical conditions

The symptoms of PPS (i.e., new weakness, fatigue, pain, cold intolerance, breathing and swallowing problems, and muscle atrophy) may occur with many diseases as well as with a prior history of polio. Moreover, some of these “other “ diseases may be life-threatening whereas PPS generally is not. Therefore, anyone experiencing symptoms consistent with PPS should have a thorough work-up by a physician who is a polio expert in order to eliminate other, more serious or potentially curable medical conditions that may mimic symptoms found with PPS.

If all other diseases are ruled out and the diagnosis of PPS is made, polio survivors should remain alert to the onset of new symptoms or the worsening of previous symptoms. A re-evaluation is indicated with either of these scenarios in order not to mistake the onset of a new medical condition for PPS. For instance, if a polio survivor has a long history of muscle pain in his arms and legs and is now experiencing abdominal pain, this warrants investigation. New abdominal pain may be a minor problem involving constipation or may herald the first warning signs of a life-threatening condition such as colon cancer. Therefore, despite having had a thorough evaluation by a polio doctor and being diagnosed with PPS, any individual experiencing new problems or more severe problems than initially reported, should be re-evaluated.

Although PPS rarely becomes life-threatening, there are many other medical conditions that may seem like minor annoyances at first, but can escalate into disabling or even deadly diseases. Some common diseases that are frequently underestimated include high blood pressure (hypertension), high cholesterol levels (hypercholesteremia), and poorly controlled blood sugar (diabetes). These are examples of diseases that should be aggressively treated in order to prevent severely disabling and potentially life threatening events such as a stroke.

Polio web sites and newsletters across the country have often contained information about medications that may exacerbate the symptoms of PPS. While this is an extremely important topic, it is imperative that polio survivors don't recklessly abandon medications they are taking to control a variety of other serious medical conditions. Anyone who is concerned with possible drug interactions or side effects from a medication should discuss this with the prescribing physician who then has the opportunity to consider

alternate treatment approaches. Certainly the goal is always to have individuals take only those medications that work effectively and cause few side effects; however, in reality this is not always possible. As with all medical treatment, it is ultimately up to the individual taking the drug to decide whether the side effects are worth the benefits. The important point here is that polio survivors need to make *informed decisions* about which medications they will and won't take. *Medications used to treat disabling or potentially life threatening illnesses should not be discontinued even if they exacerbate the symptoms of PPS unless a reasonable alternative is available or unless the individual taking the medication fully understands what may happen without it and makes an informed decision not to use it regardless of the consequences.*

## 2. Protecting the arms

There is a direct correlation between the strength of an individual's arms and their ability to care for themselves without assistance. Thus, one can say that the arms are the keys to independence and the stronger an individual's arms are, the greater the likelihood that he or she will be independent. Think of it this way—arms are essential for mobility (rising from a chair, transfers, etc.), dressing, bathing, driving a car or even communicating by phone, fax or Internet. While it is true that technology is providing new types of adaptive equipment that will enable individuals with upper extremity weakness to become more independent, keeping the arms strong and injury-free is essential.

Unfortunately protecting arms and avoiding injuries to them may be easier said than done—particularly in those individuals who rely on their arms to compensate for

trunk or leg weakness. For instance, polio survivors who rely on their arms for mobility purposes are prone to having arm injuries such as rotator cuff problems in the shoulder, nerve injuries at the elbow or wrist, tendinitis and even muscle strains and ligament sprains. For example, a polio survivor who uses a cane to walk puts pressure on the hand and arm that holds the cane. Further overuse of the arm holding the cane is very common due to putting pressure on it repeatedly in order to rise from chairs and the commodes. The combination of using the arm during ambulation and transfers as well as for everyday activities may prove to be too much and an injury or new weakness can result. Studies have shown those polio survivors, who use wheelchairs or other assistive devices such as canes and crutches have higher than average risk of injuries to the arms.

Although injuries to the arms may be inevitable, early medical attention can do a lot to mitigate these injuries. On the other hand, ignoring pain, tenderness, swelling, numbness or tingling in the arms and hands can lead to serious permanent injuries, which may in turn lead to further disability. This is because injuries are nearly always easier to treat in the early stages and those injuries that are allowed to progress to a more advanced stage become much more difficult to cure.

The good news is that many, if not most, arm injuries are treatable and often curable. The cure may involve rest from activities that exacerbate the symptoms, splints, medications, injections, physical and/or occupational therapy, and in some cases even surgery. The earlier an injury is treated, regardless of the injury, the more likely that treatment will be successful.

*In summary, for those polio survivors who have become accustomed to a variety of aches and pains, it is important to recognize that many of the symptoms that occur in*

*the arms are treatable and potentially curable—and, therefore should not be ignored. Moreover, leaving injuries in the arms untreated may lead to significant disability that may be permanent.*

### 3. Avoiding falls

Falls resulting in serious injuries is one of the leading causes of disability in individuals as they age--regardless of whether they have a preexisting disability. One of the most important things to remember about falls is that they are generally “preventable occurrences” rather than “accidents”. Common injuries associated with falls include minor bruises and abrasions, broken bones, and head trauma that may lead to permanent brain damage. Obviously, all of these injuries can potentially be disabling. However, even if an individual simply has a fear of falling (without necessarily having experienced a fall with a serious injury) this may be equally disabling by leading to social isolation because they are afraid to go out. Therefore, regardless of whether an individual has fallen or is simply worried about falling in the future, this may significantly impact their quality of life.

Preventing falls is much easier to do when one understands how and why most falls occur. Certainly there are some absolutely unavoidable situations where preventing a fall would be virtually impossible, however, as noted above, most falls are avoidable with a little forethought and planning. Falls occur for a number of reasons, but in general they can be broken down into 2 categories. The first category includes falls that occur due to a problem with the way an individual’s body works. This may be due to weakness, loss of balance, problems with vision or hearing, dizziness, etc. The second category includes

those falls that occur due to a problem with the environment. This would include falls due to hazardous weather conditions, slippery floor surfaces, cluttered rooms, etc.

In order to prevent falls, both categories—your own body and your physical environment--should be carefully considered and changes made as deemed appropriate. Medical experts who specialize in treating polio survivors can be excellent resources for information on how to prevent falls as it applies to individual polio survivors. For instance, a polio doctor can determine whether new braces are needed, if physical therapy might improve balance and strength, etc. He or she can also recommend that a physical or occupational therapist visit your home or workplace in order to evaluate how to make the environment safer (and offer suggestions on how to protect your arms!). Polio doctors and other healthcare providers can offer invaluable advice on how to prevent falls and subsequent disability.

For those individuals who trip occasionally but haven't fallen (yet), it is important to remember that a trip is less than a step away from a fall. Anyone who is experiencing tripping or falling or who is concerned that they may fall, should seek medical attention. Most falls are preventable which means that serious injuries that lead to further disability in polio survivors can generally be prevented!

Preventing further disability in polio survivors is critical. Fortunately, there are a number of things which can be done to prevent further disability but to do this requires a thoughtful intelligent approach by the individual as well as appropriate medical intervention from physicians and others who are experts in the care of polio survivors. The three ways mentioned in this article to prevent further disability in polio survivors

(treating all serious medical conditions, protecting the arms and preventing falls) are certainly not the only ways to prevent further disability, however, they are a good place to start. Moreover, polio survivors who take the initiative to try and prevent further disability will likely experience fewer problems in the future and in turn, this may give them a measure of comfort about what the future will bring.

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