

## Falling From Grace

Speaker: Fred Shirley, MS, PT, CEAS

The North Central Florida Post Polio Support Group welcomed Fred Shirley of CMHA/Gulf Coast Aquatics and Rehabilitation in Beverly Hills as the guest speaker at our October 2010 meeting. Mr. Shirley is a physical therapist who has worked with the people in our support group for 15 years and with polio survivors for over 30 years. He is a part of our group “family” and is listed as a professional on our web site as part of our evaluation team.

Mr. Shirley started the program by telling us we should ask ourselves “How can I fall gracefully?” He stated that he sees more grace when he is attending our programs than among other patients, due to the way we, as a group, handle using our assistive devices. Of course, falls are not planned and in this program, Mr. Shirley explained how we can guard our independence and protect ourselves from falls though the following means:

### **Home Modifications**

If you are considering making home modifications, it is very important to find someone to do the work who is competent, as well as licensed, insured and bonded. You need to find a contractor who is familiar and experienced with the types of modifications you have in mind and not just the neighborhood handyman. Make sure you do a background check and get references.

### **Fear of losing independence**

Many people come to him with fractures and when he asks if it is the first time they have fallen, they admit that they have fallen several times before they broke their shoulder or their hip but they didn’t tell anybody. Why didn’t they seek help sooner? Because they are afraid that they will lose their independence. By telling someone such as your physician that you are having trouble with balance, you can get the appropriate guidance and help and you will most likely not have to fear being placed in a nursing home or assisted living facility.

### **Medications**

Mr. Shirley asked us how many of us are on more than four types of medications. Statistically speaking, for every medication above the four medications that you are on, your likelihood of having a balance issue or a fall goes up proportionally.

Balance is three things, it is somatosensory (the information that your brain gets from you feet, knees, joints, muscles, all the things that tell you where you are in space), the vestibular system (the inner ear that tells you what is up and down) and vision. If it has been more than a year since you had a vision exam, get them checked!

If you go to more than one doctor, and each doctor puts you on a different medication, it is important for you to let each of them know what medications you are on. One

medication may counteract what another medication is doing or may have an effect on your balance.

### **Home Safety**

We are getting into the season where Mr. Shirley will be very busy due to people having accidents and injuries from getting up on ladders, getting up into the attic, and slipping on fallen leaves while preparing for the holidays. This can result in having a not so funny fall. Many people find watching someone take a fall hilarious. It isn't so hilarious for someone who is injured, especially if they have post polio syndrome.

### **Exercise**

People who have post polio syndrome exercise differently, even from each other as well as people who do not have PPS. What was affected? What's tight? What's loose? What's weak? What's strong? These are things that make exercises different for each and every person. Mr. Shirley is sorry to say that a lot of the therapists in the area and even many of the doctors don't have a clue as to what polio was, let alone what post polio syndrome is. This is because as far as a medical school in America is concerned, polio is a dinosaur. It is something that occurred in the 1940s and 1950s and isn't a problem anymore in the United States. But if you go to Africa, or South America, polio is still a huge problem.

For people without post polio syndrome, if a therapist feels a tightness in a muscle, the first thing he wants to do is stretch that muscle out and get it flexing again. However, a person with PPS may need that tightness in order to function. If that tightness is taken away, the patient may not have the capacity to improve the muscle tone in there to control the hyper-flexibility or flexibility that has been given to her.

Once again, it is very important to find a therapist who knows what PPS is, and not someone who says he may have read a book about it. If that's the case, tell him thank you that is very interesting and go and find someone who does know what he is doing. Also, post polio syndrome is not treated the same way that polio was treated. If you remember the end of your treatment for polio, do you remember having any "easy" exercise treatments? *Not at all!* If you were treated that way today with PPS, that treatment would not only cause muscle fatigue, but it would over fatigue your nervous system to a point where your neurons would not be firing correctly.

### **Falls are Life-Changing**

- 30% of people over 65 and 50% of people over 80 fall each year.
- Falls are the number one injury-related reason seniors enter the hospital.
- 90% of hip fractures are from falls. (The other 10% are spontaneous caused by osteoporosis.)
- Falls cause injury, deaths, loss of independence, and fears that limit activities.

Many people who fear falling use walkers. Walkers with seating devices come in handy if you need to sit down every once in a while, but these type of walkers can cause back

injuries from leaning forward for long periods of time. But if you use a walker, you shouldn't completely rely on it and you should do physical therapy exercises to keep your strength up. You need a prescription in order to receive physical therapy either outside or in your home.

Home falls are usually caused by common items in the home; electrical cords on the floor, throw rugs, shoes and pets. You usually walk into your home and head right for whatever you are going to do. You don't look first because you are familiar with your surroundings.

### **Risk Factors**

- Lower body weakness
- Problems with walking and balance
- Multiple medications
- Other health factors such as diabetes, foot problems such as bunions, etc.

If you have a problem with numbness or tingling in your feet, your brain takes a while for your feet to communicate what you are stepping on.

Once again, this can affect your somatosensory system which relates to what is called your cone of stability, or how far you can lean before you have to take a step. If you are standing in a crowd and somebody moves, you may feel your body sway and you have a short reaction time to keep from losing your balance. Your vestibular system is like the feeling you get when you are sitting in a parked car and the car next to you starts to move and you react as if you are moving and step on the brake. As we grow older, our capacity for mobilizing our lower extremities can be low due to weakness, medications and health factors and this can cause us to fall.

Another cause of weakness can be from forced bed rest. Three weeks of bed rest can be equal to 30 years of aging and this effect will need to be reversed after you become mobile again through physical therapy.

### **Summary**

To prevent "falling from grace":

- Pay attention to your health, make regular visits to your doctor.
- Monitor recurring health issues.
- Look for common risk factors in your environment such as tripping hazards, lack of railings or grab bars, slippery surfaces, awkward reaching and storage, poor lighting and unstable furniture and loose carpet.
- Make design changes. Improve accessibility and adaptability. Incorporate universal design principles and build safety into your pre-retirement plans.
- Exercise regularly to increase upper and lower body strength, work on hand strength and improve your balance and coordination. It takes 96 hours to lose the strength you have gained through exercise and physical therapy.

- Increase your overall sense of well being.

Mr. Shirley concluded the program by answering questions from our group. Fred is a very good friend of our group and we thank him as always for presenting a lively and informative program and look forward to hearing from him at future meetings.

Summary, October 2010 Polio Post News by Sharon Daszczyński