

Because the speaker at our Annual Retreat, Dr. Lori Michener, is a shoulder specialist, I thought it was timely for us to think about our arms and shoulders and the abuse many of us put them through in the course of a day. Maybe by reading this article, you can think of a good question for Dr. Michener when you attend the Retreat.

Shoulder Concerns for People Experiencing Post-Polio

As polio survivors age, many experience problems in new areas of their body. One such area is the shoulder. Polio survivors who have weak legs have had to rely on their arms to assist with mobility related tasks such as pushing off the armrest of a chair when getting up or pulling on the railing when climbing a flight of stairs. Using crutches, canes and wheelchairs will also cause concerns after many years of using these aids. All of these arm compensations can increase the risk for symptoms of shoulder overuse. The symptoms can include pain, swelling, weakness and loss of function in one or both shoulders.

We hope to present information in this brief article about how to help polio survivors who are experiencing shoulder problems. Health care professionals are encouraged to learn about post polio to enable them to help overcome presenting problems without creating any new ones. One example: muscle overuse for patients experiencing post polio can permanently damage the overworked muscles.

Treatment approaches must be individualized and focus on minimizing or eliminating pain while maximizing function; and done without causing weakness to any area of the patient's body.

Common Causes of Shoulder Pain:

- Poor sitting posture – round shoulders, head forward, kyphosis of the thoracic spine, sacral sitting scoliosis
- Weak muscles that stabilize the shoulder blade and rotate the arm outward compared to the other shoulder muscles (i.e. weak external arm rotators and strong deltoids)
- New weakness or weakness of other muscles of the arms
- Trauma or injury (such as falling onto an outstretched arm, tearing tendons, brachial plexus injury, fracture)
- Excessive weight bearing on the arms, especially when muscles are fatigued (leaning heavily on an assistive device, numerous transfers and/or long term wheelchair pushing with arm fatigue)
- Poor or less than optimal transfer and/or wheelchair pushing techniques
- Excessive weight gain
- Sleep positioning directly on the shoulder
- Cervical spine or neck problems

Shoulder Problem Treatment Options:

Many approaches can be used to treat shoulder problems. Some examples of treatment are:

- Rest
- Cold Pack or Hot Pack
- Massage
- Ultrasound
- Aquatic Therapy
- Electric Stimulation
- Anti-inflammatory medicines or cortisone injections
- Pain Management at a Pain Clinic
- Modifications at home or work, adaptive devices or equipment, lifestyle changes
- Surgery

The most common treatment for shoulder problems begins with rest, ice and heat, and the use of anti-inflammatory medicines. If these conservative treatment options do not help, the doctor usually recommends cortisone injections to the painful area. After injections, the physician will often refer you to physical therapy for evaluation and treatment.

In physical therapy, there are several treatment techniques that can be combined to relieve the pain and increase the strength and use of the arm. Physical therapists may use exercise, stretching, heat, ultrasound (a deep heat), massage, electric stimulation (electrical current used to decrease pain or increase movement, water therapy or hands on techniques to help your shoulder problem.

The final option recommended by a doctor is usually surgery. Most doctors will try non-invasive options before recommending surgery.

The success of treatment lies with the patient and the healthcare provider working together so that the greatest benefit of the treatment goals can be reached.

It is very important **to listen to your body** for signs of tiredness, pain, unusual muscle twitching, inability to perform a task that you can normally do or the need for help with a task that you can usually do without help. **These are signs suggesting muscle fatigue or overuse and continuing activities that cause these signs could be harmful.** Each person needs to find a system that works best for them...**however, it is crucial to prevent fatigue because it many do irreversible harm to your muscles.**

References:

"Save Our Shoulders, a Guide for Polio Survivors". A complete download of this guide is available at www.einstein.edu/polioandmobility

Rehabilitation Research and Training Center on Aging with a Disability, www.agingwithdisability.org/factsheets/shoulder_pain.htm

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