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Stroke Recovery Tips

www.stroke-rehab.com

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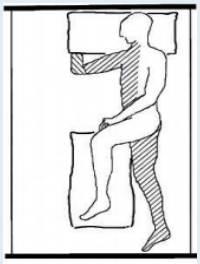
POSITIONING AFTER A STROKE

After having a stroke, one may experience paralysis on one side of the body. Sensation to the affected side is often impaired so it is not uncommon for that side to be in awkward positions without the person knowing it. This can lead to injury to the affected side. It is also not uncommon to have shoulder subluxation where the upper arm bone is no longer firmly in place but rather hangs down from the shoulder socket. The pull of gravity on the arm can cause further stretching to ligaments and muscles that are weak. It is also not uncommon for a stroke patient to have difficulty with positioning in bed ending up with affected limbs under them or in precarious positions that can cause pain.

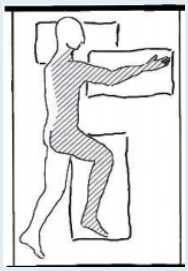
It is important to learn how to position the body and limbs after a stroke to prevent further injury, pain, edema, and pressure sores. Here are a few guidelines for positioning once patient is medically stable.

Lying on the affected side:



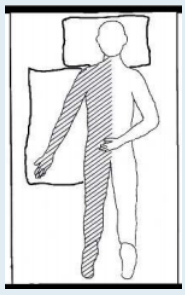
The shoulder on the affected side should be slightly forward and positioned at approximately 90 degrees from the body. If possible, the back of the forearm should be laid on the pillow or can be placed under the edge of the pillow. The arm can be out straight if it won't stay in this position. The non-affected leg can be placed on a pillow supported from the knee to the foot. A pillow can be placed under the non-affected arm for comfort if needed (not shown in pic).

Lying on the non-affected side:



The full surface of the affected arm can be supported on a pillow (make sure the shoulder is slightly forward). The affected leg should also be placed on a pillow . Make sure the entire body is slightly rolled forward supported on the pillows to prevent the patient from rolling back or pillows can be placed behind patient to keep them from rolling back.

Lying on the back:



The affected side should have a pillow under the shoulder and arm with the palm facing up if possible. The affected shoulder should be even with the other shoulder. A thin pillow can also be placed under the affected hip if the pelvis tends to pull backwards on that side. The goal is to keep the hip and shoulder on the affected side level with the non-affected shoulder and hip.

Sitting:

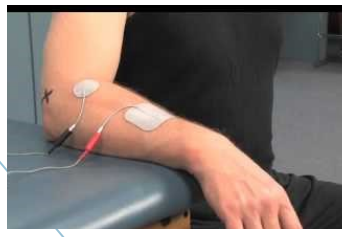
The affected arm should be supported. This can be achieved by pillows, pillows on a table, or a wheelchair tray or arm trough. This it to help give support to the affected shoulder and to keep the shoulder from sagging. The hips should be centered and back in a chair. The hips and knees should be at 90 degrees. Talk to a physical therapist about positioning devices if leaning to one side is a problem. The trunk should be straight without the person leaning off to one side. The feet should be flat on the floor or on footrests.

For more information on positioning or positioning devices visit some of these websites:

http://www.chss.org.uk/documents/2013/08/f16_stroke_positioning_chart.pdf

http://estroke.com.au/CA2578840009A7CC/Lookup/EvidenceToPracticeGuides/$file/Upper%20limb%20-%20positioning.pdf

http://physiotherapyguide.blogspot.com/search/label/NEUROLOGY

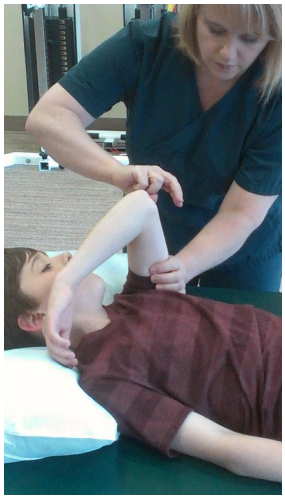


NMES

Biofeedback

Mirror Therapy Lower Limb

Mirror Therapy Upper Limb



Tapping the Triceps

Stroke Rehab for the Paralyzed Limb

I often get asked the question from patients and caregivers of what to do for a leg or arm that has no movement. I usually start patients out learning how to do passive range of motion first. Passive range of motion can be done by taking the unaffected arm and moving the paralyzed arm or having a caregiver move the paralyzed arm or leg. Passive range of motion is done to keep the limb flexible through the available range of motion and to make sure the limb is not left in the same position over time which can cause contractures. I also show patients and caregivers how to favorably position the arm avoiding habitual postures such as shoulder internal rotation and trying to get the arm positioned in shoulder external rotation at times. You can read about passive range of motion at http://www.stroke-rehab.com/passive-range-of-motion.html.

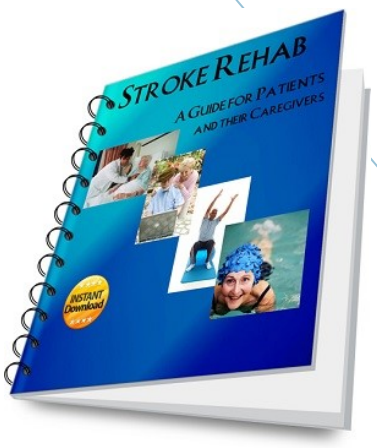
If the arm has poor or no sensation, I recommend trying to give input to the arm through vibration, stroking, and sensory re-education activities. You can read about sensory re-education at http://www.stroke-rehab.com/sensory-re-education.html.

If the patient is a candidate, I will use NMES (neuro-muscular electrical stimulation) on the paralyzed limb. Electrical stimulation will cause the muscles to contract as well as give sensory input to the patient. NMES may also be helpful in preventing or reducing shoulder subluxation. There is also various robotic equipment that can be used with the patient including equipment that moves the limb or combines NMES with movement. Other activities that can be used in the clinic include biofeedback and virtual reality programs. One should consult with their therapist to use this type of equipment/therapy.

An activity that an be done at home is graded motor imagery. This involves first being able to identify the left from the right side. Left right discrimination can be impaired after stroke. The next step in graded motor imagery is visualization or imagining the limb moving or even watching someone else move. The third component of graded motor imagery is mirror therapy. With mirror therapy, one will use a mirror box or place a mirror in the midline of the body. The paralyzed side will be occluded from vision by the mirror, and the patient will watch the reflection of the non-affected limb moving in the mirror. This "tricks" the brain into thinking that the paralyzed limb is moving as the reflection appears to be the paralyzed limb. Mirror therapy has been shown to cause neuroplastic changes in the brain in some studies. This therapy will be repeated over time in an attempt to help form new connections in the brain and with the goal of trying to initiate movement in the paralyzed limb.

In addition, muscle facilitation techniques such as tapping can be used. This will often elicit a reflex causing the limb to slightly move which at times will help the patient get started on a movement. I often will lie the patient down, hold the shoulder at 90 degrees while tapping the triceps (see pic at side) which will start the arm into extension (or straightening). As the patient feels the movement, they are often able to extend the arm on their own and with a little practice can often begin to extend the arm with no tapping. Lying on the back increases extensor tone many times in stroke patients which makes it easier to extend the arm. This is often very exciting for the patient and motivates them to keep trying to move.

These are just a few of the techniques I use with paralyzed limbs. To find out more in depth information about the techniques, I suggest searching the terms online and discussing them with your therapist. Online information can be very helpful, but it sometimes can be erroneous or misleading so always try to verify information you get with reliable sources such as research reviews or medical experts.



Stroke Rehab e-book: A Guide for Patients and their Caregivers

Exercise photos included

Visit

http://www.stroke-rehab.com/stroke-rehab-e-book.html

CAREGIVERS' CORNER – Online Stroke Support Forums

Once home with a loved one that has experienced stroke, many caregivers feel overwhelmed and unsure of where to turn for help or answers. Though helpful, many times information received in hospitals is not sufficient to prepare someone for the task of caregiving. In addition, there are many emotions that occur with caregiving, and often the caregiver has no one to talk to regarding these thoughts and emotions. Sometimes, caregivers feel guilty for experiencing negative feelings about caregiving although these feelings are normal and quite understandable. A valuable resource for caregivers are support groups. When it is not feasible for a caregiver to go in person to a support group, support can often be found online. There are many forums where caregivers can discuss their problems with caregiving, get helpful information from others, and share their thoughts and emotions safely. It is extremely important for caregivers to have some type of support, and online forums can often provide the anonymity that some caregivers need to truly open up or ask questions that they would find embarrassing to ask in person. Below is a list of various caregiver online forums. Some are specific to stroke caregiving and others are not.

www.Caregiver.org

Aging Parents and Elder Care Support Group

StrokeNetwork.org

http://careliving.stroke.org/

http://supportnetwork.heart.org/registration

http://youngstroke.org/community/caregivers/

https://www.caring.com/support-groups/heart-and-stroke

http://forum.stroke-rehab.com/
This is a new forum I have created on the stroke-rehab website. It is in it's infancy, but I would love to have caregivers start sharing information with each other. I can also provide answers to caregivers on the forum as well.