Protect Your Shoulder with Hemiplegia

Weakness on one side of the body is called hemiplegia and it is common after a stroke. You need to protect your shoulder joint on your weak side if you have hemiplegia to prevent injuries.

About the Shoulder Joint

The shoulder joint is made up of 3 bones.

- The clavicle at the front
- The scapula or shoulder blade at the back
- The humerus in your upper arm

The ball shaped end of the humerus is held in the shallow socket of the scapula by muscles and tendons called the rotator cuff. The scapula and humerus work together to allow your arm to rise up.
When you have weakness on one side, the muscles of the arm and shoulder are not able to work as well. You need to limit some motions to prevent injuries.

**How to Prevent Shoulder Injuries**

You may not have the strength to raise your weak arm without help. If you or someone raises your elbow on your weak side above your shoulder, the humerus gets pushed into the scapula socket. The muscle can get pinched in between the scapula and humerus. This injury is called **impingement**.

Pain and long term damage can occur in the joint.

To protect your shoulder joint from this type of injury, **do not raise your weak arm above the level of your shoulder** with your other hand. Also, do not let anyone else lift it higher than your shoulder. **Do not pull on or twist your arm at the shoulder.**

If your rotator cuff muscles get weak and lose tone, the humerus in your upper arm may slip down out of the scapula socket. This is called **subluxation**. Protect your shoulder from this injury with exercises. Exercises help keep the muscles of the shoulder strong and the muscles can pull the humerus back into the socket.
If you sit in a slouched or leaning position, your scapula is not able to move as well and can prevent your upper arm from moving to cause injury. Using good posture can help prevent this injury.

Treatment to Protect Your Arm and Shoulder

Hemiplegia of the arm is treated with:

- Good posture and balance when sitting
- Exercises to strengthen the shoulder and arm

The use of an arm sling does not help the shoulder with hemiplegia. The sling may keep the arm in poor position. Wearing a sling may cause more pain and swelling to occur so it is not recommended.

Use of a lap tray on a wheelchair can keep your arm supported to prevent further shoulder problems.

Use Good Posture

Your posture impacts how well the shoulder joint works.

- To improve your shoulder movement, sit up tall as often as you can to keep your shoulder blades or scapula in the correct position.
When you sit in a chair, place a rolled towel or pad in the curve of your lower back. This helps you sit upright and keeps your back comfortable.

**Exercises**
Talk to your doctor or therapist about how often you should do these exercises.

- Do each exercise ____ times each day.
- Repeat each exercise ____ times.

**Rock the Baby Exercise:**
- Hold your weak arm at the elbow with your other arm, like you are holding a baby.
- Twist your body at your waist, taking your arms to your right.
- Twist your body back at the waist, taking your arms to your left.
Scapula Exercises:

- Shrug your shoulders, bringing them up toward your ears. Relax and then repeat.

- Bring your arms back to bring your shoulder blades together. Relax and then repeat.

- Roll your shoulders in circles. Relax and repeat.
External Rotation Stretch:

- Lie on your back with your arm 45 degrees to your side.
- Gently rotate your hand back, supporting your lower arm on a pillow.
- Leave your arm in this position for ____ minutes for a long stretch.

As you gain more strength and movement of your arm, your therapist will give you exercises to increase coordination between your arms.

Talk to your doctor or others on your health care team if you have questions. You may request more written information from the Library for Health Information at (614) 293-3707 or email: health-info@osu.edu.