

❖ Improving Upper Extremity Function & Awareness

Three Ways to Include a Nonfunctional Upper Extremity into a Task

Even before movement returns to the nonfunctional extremity, you can encourage the patient to incorporate the involved hand into daily functional activities. Therapists should always include the nonfunctional upper extremity during functional tasks in one of the three ways described: weight bearing, guided movement or bilaterally. Each and every opportunity, large or small, can help the overall recovery of the patient by improving their potential for recovery.

1. Weight bearing/Stabilizer

Movement often begins within the context of a functional task, even before an exercise program begins. Incorporating the involved hand can be as simple as placing the arm on the table to support it in weight bearing or by holding or stabilizing an object.

Patients, who are positioned in this way, with the arm supported and used as a stabilizer, are more likely to spontaneously include that extremity into everyday tasks.

2. Guided Movement

Guiding is another method which can be used to help improve function and awareness of the hemiplegic side. It is incredibly effective. Guiding a patient during a task reduces the need for verbal cueing. In addition to encouraging more normal movement patterns, it is also very effective for patients with aphasia, apraxia, motor planning problems, and hemionopsia.

Guiding is best described as the therapist placing her hand over the patient's hand in order to carry out the correct manipulation of objects during a task.



- Place your hand over their hand, down to the fingertips.
- Try to move with them in as normal a movement pattern as possible.
- Minimize talking, allowing feedback to come from the activity.
- Stand or sit where your movements are similar to theirs.
- Be sensitive to your patient's movements; move with them and in a normal movement sequence.
- Guide both hands when possible (not just the weak hand).

⌘1 Pause and Practice with a Partner

Select a simple task and following the above directions, guide your partner's hands to experience this therapeutic method.

3. Bilateral

When patients use both hands together, at the same time, it helps improve awareness of the involved side and better integrates the involved side with the non-involved side. This can begin early in the rehabilitation process.

Teaching patients to clasp their hands together. Helps them remember the weak hand. For example, as they roll over in bed, keeping the hands together helps them avoid rolling onto the glenohumeral joint of the involved arm, which could cause impingement and subsequent pain.



Bilateral use of the upper extremities can also help patients inhibit their own abnormal patterns of movement. By clasping the hands together in order to take the foot on and off the footrest of the wheelchair, the patient brings the scapula forward, reducing flexor tone of the upper extremity and, at the same time, incorporating the involved hand into the task.

Bilateral use of the upper extremities can also facilitate dynamic trunk control. A patient's base of support becomes narrower when the upper extremities are removed from weight bearing and used bilaterally during tasks in sitting or standing. Therefore, bilateral use of the upper extremities during tasks activates more dynamic trunk control.