

# An Underutilized Tool for Cancer Survivors

AS ADVANCED CANCER TREATMENTS CONTINUE TO DEVELOP, RESULTING IN INCREASED SURVIVORSHIP NUMBERS, THE INSTITUTE FOR HAND & UPPER EXTREMITY REHABILITATION FOCUSES ON ENHANCING SURVIVORS' QUALITY OF LIFE.

**N MARCH 2012**, Linda Stanley, OTR/L, CHT, founder of the Institute for Hand & Upper Extremity Rehabilitation, saw a new patient who had recently battled cancer. Chemotherapy administered six months prior to treat a tumor in the patient's brachial plexus had succeeded in eliminating the cancer, but not before the tumor had rendered her right arm and hand all but useless due to nerve damage. The patient was incapable of any wrist or finger motion in the hand, and the affected shoulder, elbow and forearm were significantly weakened.



Linda Stanley, OTR/L, CHT

When the patient initially sought occupational therapy shortly after completing chemotherapy, her fingers were swollen but not yet stiff. The original therapist — who was not a certified hand therapist — overlooked the need to provide the patient with exercises to treat the swelling. By the time of the patient's initial visit with Stanley, who is a certified hand therapist, joint contractures had caused severe stiffness in the fingers.

"Swelling is a red flag that the patient would benefit from therapeutic intervention," says Stanley, who emphasizes that this particular patient could have benefited greatly from seeing a certified hand therapist sooner. "If I had seen her from the beginning, I would have worked with the swelling so she wouldn't have had the severe tightness she has now. Keeping her moving and showing her stretches would have helped her condition."

According to Stanley, because the tumor was located on the brachial plexus, restoration of motion in the hand and arm will likely take a great deal of time.

With that in mind, Stanley's initial treatment goal was to loosen the patient's joints so that, when nerve and muscle function returned, the patient would be able to move her hand and fingers.

To rehabilitate the muscles in the patient's arm and shoulder, Stanley is using cuff weights and an improvised device created by forming a loop at the end of an elastic exercise band through which the patient places her hand to perform elbow flexion and extension exercises. A hand brace employing rubber band attachments was also designed to produce a prolonged stretch of the patient's fingers by keeping them in a bent position for extended periods. While the patient currently wears the brace once or twice a day for 45-minute intervals, Stanley is hoping to gradually increase the length of the intervals until the patient can wear the brace throughout the night.

Stanley notes that the patient still has a long way to go before she regains the use of her hand, but her progress has been encouraging, as the patient has now begun to regain some active contraction in the muscles in her fingers.

## Restoring Normalcy

Stanley emphasizes that therapeutic involvement by physical and occupational therapists can be beneficial as an early avenue to restoring a sense of normalcy for cancer survivors. As cornerstones of cancer rehabilitation, physical and occupational therapies have demonstrated successes in reducing the effects of chemotherapy on patients' energy levels, according to Stanley, but are underutilized as early strategies. As soon as a patient shows signs of reduced function, Stanley notes, he or she would benefit from a referral to the correct therapeutic specialist.



While specialized therapy can be helpful for cancer patients suffering any sort of physical limitation as a result of their treatment, Stanley points to breast cancer patients who have undergone mastectomy as a demographic that would especially benefit from the Institute for Hand & Upper Extremity Rehabilitation's care. Breast cancer surgery can often leave patients with a compromised range of motion, as well as swelling and pain — all of which can be worked out under the expert care of a certified specialist like Stanley.

For more information about The Institute for Hand & Upper Extremity Rehabilitation, please visit [www.handinstitute.com](http://www.handinstitute.com). ■