

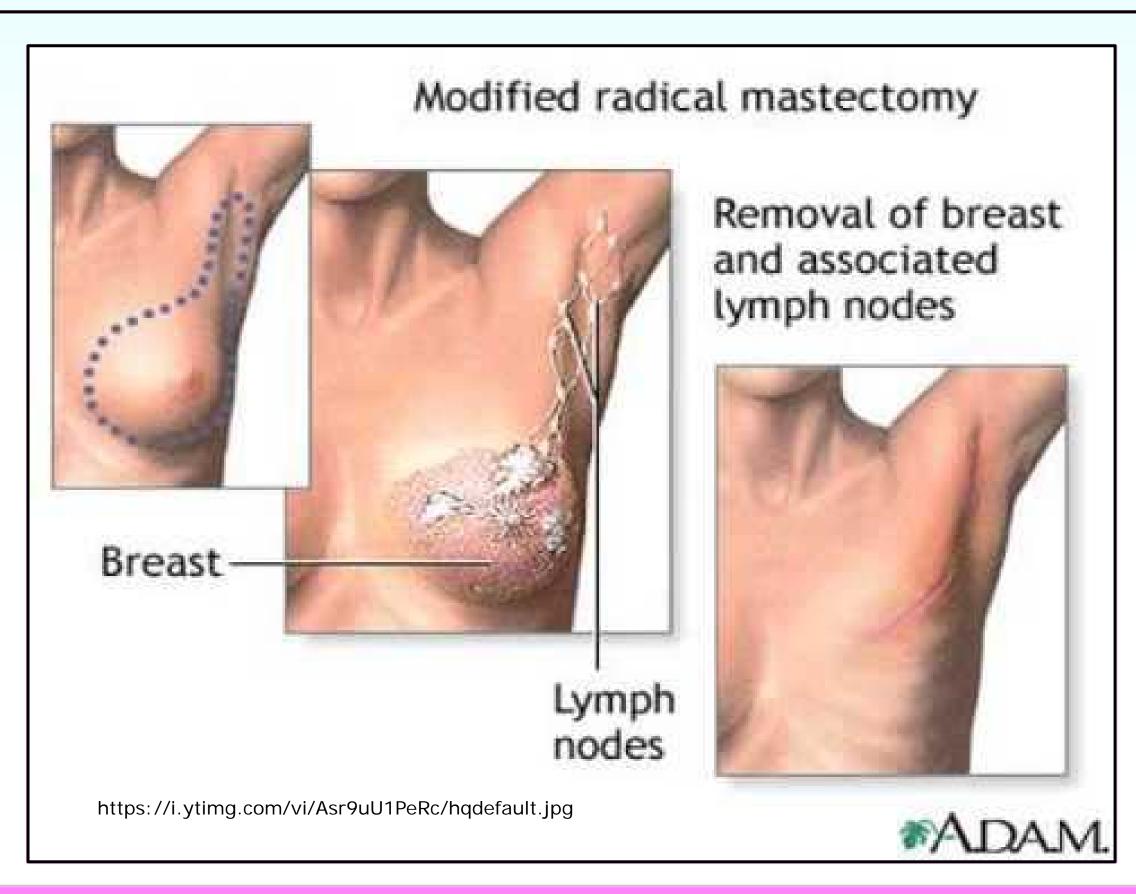
Shoulder Strengthening, Taping and Postural Reeducation in a Breast Cancer Survivor after Bilateral Mastectomy: A Case Report



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Background and Purpose

- Breast cancer is the most common cancer experienced by females in the United States.¹
- In breast cancer survivors, weakness of the rotator cuff musculature is often considered a contributing factor to rotator cuff pathology.²
- The purpose of this case report was to help fill the gaps in literature by documenting the use of therapeutic exercises to strengthen the shoulder complex, in conjunction with taping techniques for postural reeducation, of a female breast cancer survivor.



Case Description

- 56-year-old Caucasian female
- Diagnosed with invasive ductal right (R) breast cancer. Neoadjuvant chemotherapy initiated immediately following diagnosis.
- Bilateral mastectomy performed four months later, with - R sentinel lymph node biopsy (0/4).
- The patient was seen by an occupational therapist (OT) one month after surgery for the treatment of axillary web syndrome and lymphedema in the R axilla for four weeks.
- She discontinued OT at the start of PT for the diagnosis of R shoulder impingement.
- Problem list: R shoulder weakness, pain, poor posture, and extreme fatigue with upper extremity activities.

Examination and Outcomes

Test and Measures	Initial Evaluation	Re-evaluation
Shoulder Flexion	3/5	4/5
Shoulder Abduction	3-/5	4/5
Disability of Arm, Shoulder and	38/100	38/100
Hand questionnaire		
Empty can/Full can test	+	+
Numeric Pain Rating Scale	0/10 at rest, 7/10 with activity	0/10 at rest, 3/10 with activity

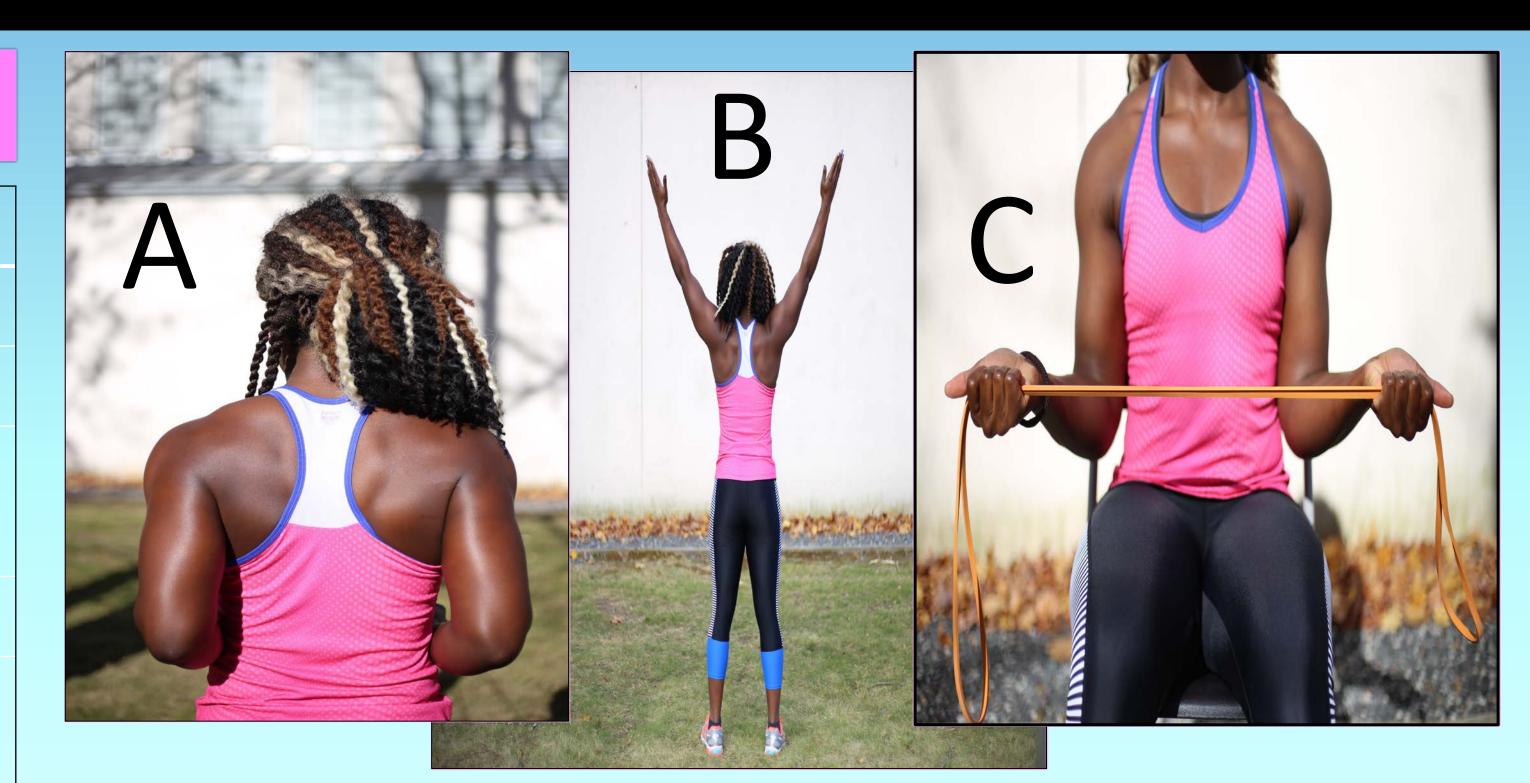


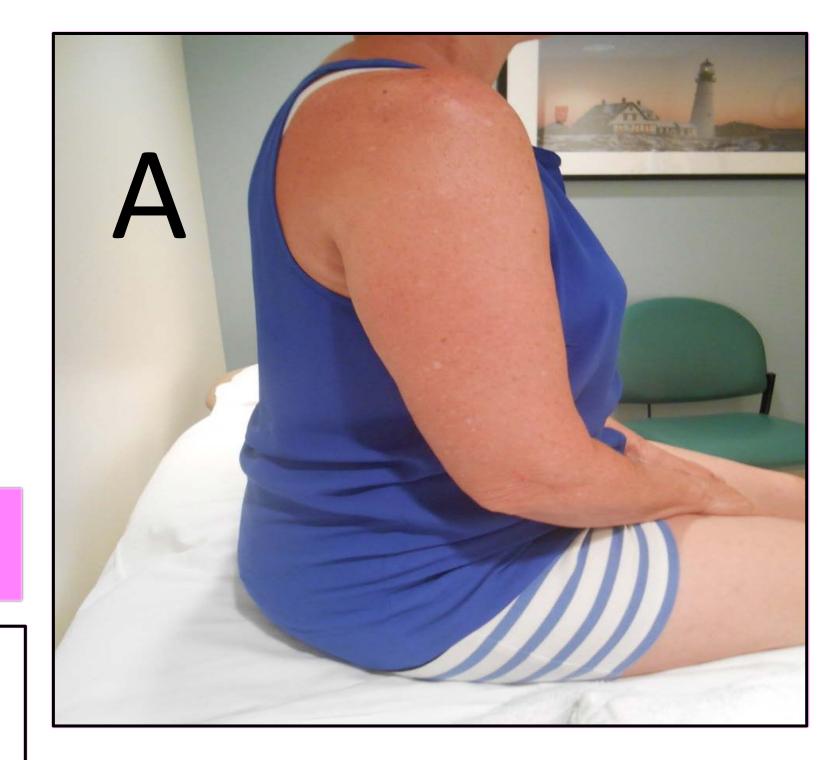
Figure 3. Therapeutic exercises: A. Rows, B. Standing "Y", C. Bilateral external rotation in sitting

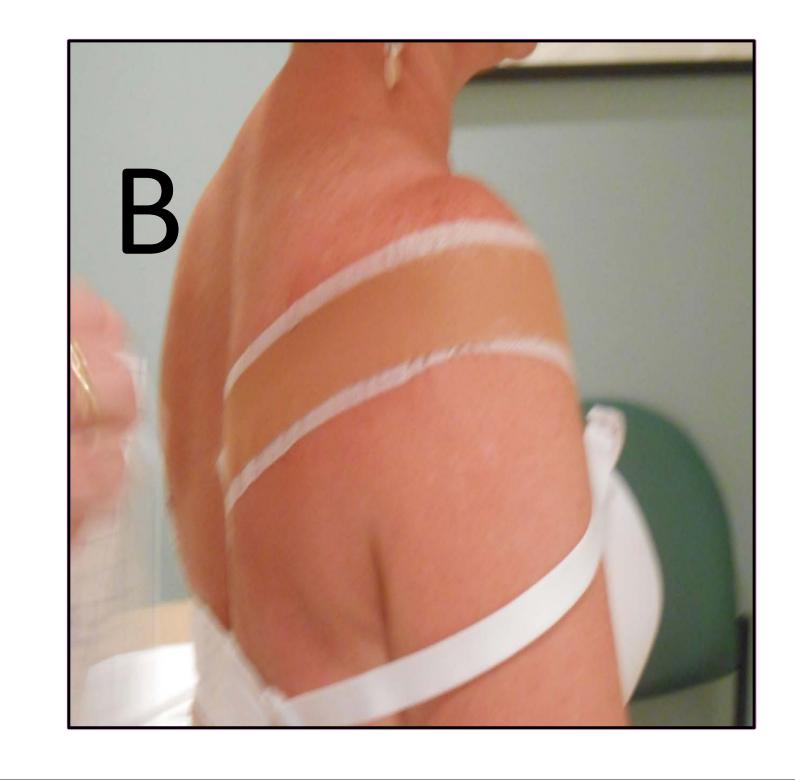
Interventions

Manual Therapy

McConnell Taping Therapeutic Exercise

Home Exercise Program





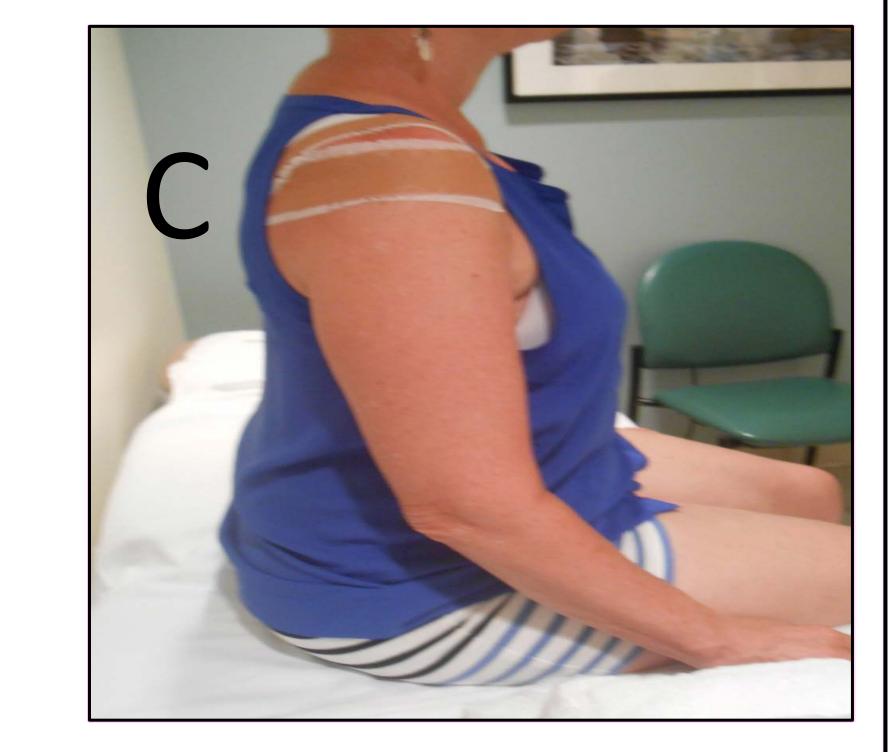


Figure 1. McConnell taping sequence: A. Prior to taping, B. Mid taping, C. End result



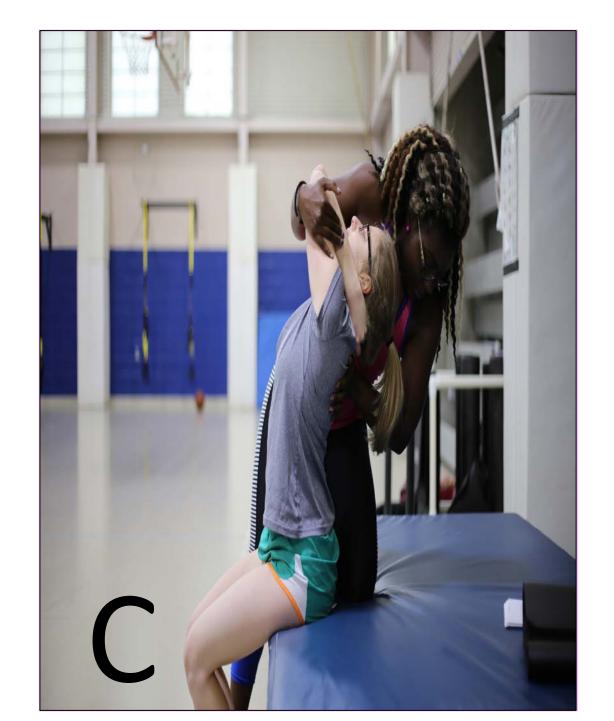


Figure 2. Manual Therapy: A. Subscapularis trigger point release, B. Starting position of scapulothoracic spine posterior and anterior glide mobilization in sitting, C. End position of scapulothoracic spine mobilization

Discussion

- Shoulder impingement and weakness can lead to debilitating physical impairments that may limit an individual's functional ability as well as their independence.
- Factors that positively influenced this patient's outcomes included family support, the therapeutic interventions prescribed, and high motivation.
- These findings suggest that the use of therapeutic exercises to strengthen the shoulder complex, in conjunction with taping techniques for postural reeducation, may have improved physical function through improved shoulder strength, improved postural alignment, and decreased pain with activity.
- Research is needed to validate the outcomes of combined rehabilitative techniques in breast cancer survivor with rotator cuff pathology.

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References

1. Stubblefield M, Custodio C. Upper-Extremity Pain Disorders in Breast Cancer. *Cardiopulmonary Rehabilitation and Cancer Rehabilitation*. 2006;87(3),96-99. doi:10.1016/j.apmr.2005.12.017.2. Breast Cancer-Patient Version. National Cancer Institute Web site. http://www.cancer.gov/types/breast. Accessed July 24, 2016.