

*Understanding Rehabilitation
and Recovery After Breast
Surgery*

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- Cancer is one of the few diseases where a patient goes in feeling reasonably well and emerges from “successful” treatment feeling awful.

Successful Treatment

There needs to be a paradigm shift in thinking about successful cancer treatment

Is cancer success simply
being cancer free?

OR

Is cancer success being
cancer free and ALSO
returning to a pain-free
active and healthy
lifestyle?



Exercise Interventions for Upper Limb Dysfunction due to Breast Cancer Treatment

- Review of 24 recent studies on intervention and rehab following surgery
- Structured PT in post-op period improved range of motion and pain short term and shoulder function long term
- Very early movement does cause increased wound drainage volume and duration
- No evidence of increased risk of lymphedema

Acute Recovery

First two weeks post
surgery

How much can I do?

- We want to give your body the best chance to heal following surgery
- There are several things you can do immediately post-operatively to ensure the best outcomes and to avoid complications:
 - REST
 - Avoid excessive movement of the arm

Why Can't I Use My Arm?

- Healing is occurring in the lymphatic collecting vessels that are trying to reconnect through the armpit and chest wall area where nodes may have been removed or where skin was cut.
- Studies show it takes 7-10 days for these vessels to start reconnecting
- Therefore, while your drains are in, plus three more days we want to you significantly limit the use of your arm on the surgical side.

Why do I need to rest?

- Studies show that women and men who follow precautions while drains are still in plus three more days have less wound drainage volume and tend to get their drains out sooner.
- Your body doesn't care if your house needs cleaning, or your garden needs weeding, or the dog needs walking.

So, what does that mean?

- Avoid cooking or household chores
- Avoid working, decrease computer activity
- Have someone else walk the dog and take care of pets
- Avoid exercise for cardiovascular conditioning or weight loss - don't do too much, too soon
- Movement restrictions of the arm – below 90 degrees of motion (shoulder height)

What CAN I Do?

- Shoulder rolls: Gently lift your shoulders towards your ears, roll them back and complete a full circle. Do this 10-15 times a few times a day, both forward and backwards. Keep arms at your side
- Deep Breathing - this moves skin over rib cage, can help prevent pneumonia and blood clots
- Light walking around your house
- You can use your arms below 90 degrees – eating, etc is OK!

Posture, Posture, Posture!

- Posture is VERY important!!
- Avoid hunching forward, rolling your shoulders in, slouching down and having your shoulder hunch up toward your ears.
- These are all positions that you will feel like assuming when you come out of surgery, but they will all cause you more pain down the road and actually delay return to movement.
- Although we restrict your movement of your arm during the first week, you can work on your posture and your body position immediately, which will provide some pain relief

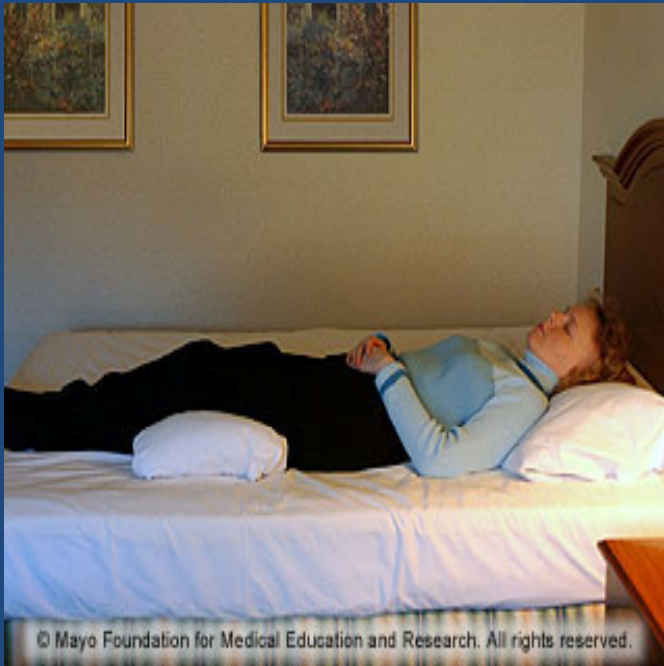
Sleeping

- It is often hard to find a comfortable position to sleep in during the first week or two after surgery.
- Try to avoid sleeping sitting up on the couch, since this will cause you to have increased neck and back pain because of the position your body is in.
- We recommend sleeping on an angle by purchasing a wedge or building up pillows under the mattress.
- Make sure that this is a gradual incline and that your neck can rest comfortably without falling forward.

Sleeping

- Place a pillow under the affected arm while you are lying on your back in order to put the arm in a neutral position. You should feel like you can relax the muscles in that arm and not be guarding. Pillow should be placed so your arm can rest comfortably in front of you.
- It is also helpful to place a pillow under your knees when you are laying on your back in order to help **support your back**

Supine Sleeping Postures



Pillows should be under knees and under arms.

Sleeping

- Once you get to the point where you can lie on your side, place a pillow between your knees.
- Build up pillows next to your body, or under your arm so that your affected arm is supported and not falling towards the front of your body.





Pain

- Suggestions for Pain Reduction
 - Stay ahead of the pain with your pain medication - do not wait for the pain to get bad before you take medication
 - Avoid Overuse
 - Reduce swelling
 - Follow directions for safe return to movement
 - Avoid protective posturing
 - Use pillows to help arm and shoulder relax in sitting and lying down

Coughing and Sneezing

- When you feel a cough or sneeze coming on, you can “splint the cough”. Do this by gently hugging a pillow to your abdomen while you cough. It will decrease the pain.

What Can my Family and Friends do to Help?

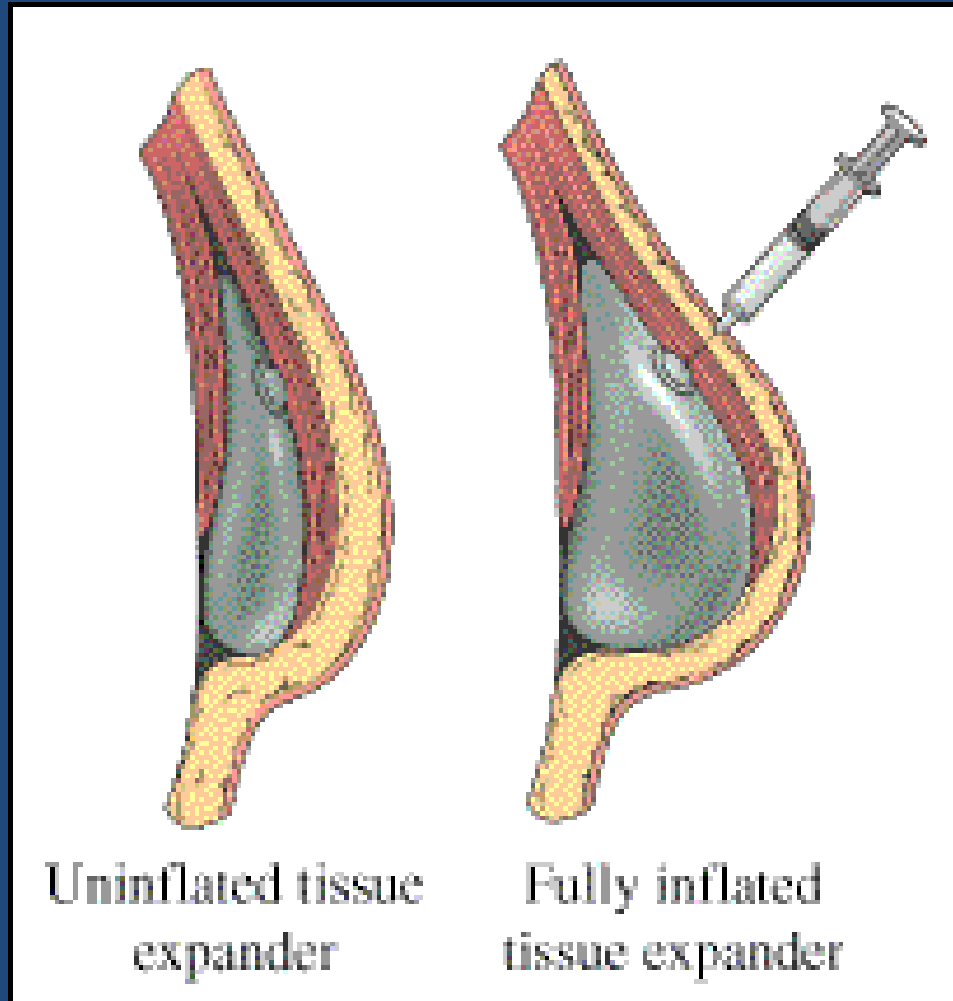
- Food! Either stock your freezer or have friends bring meals every day or two to the house
- Leave a cooler outside your front door for people to leave meals
- If you have kids, have friends do carpool for you
- Have friends help walk the dog
- Have friends sign up to take short walks with you

Breast Reconstruction
and Recovery

Breast Reconstruction

- Evidence suggests that persistent postsurgical pain may be a significant risk for women undergoing breast reconstruction.
- Women who undergo implant reconstructive surgery appear to be at increased risk for breast pain and shoulder pain.

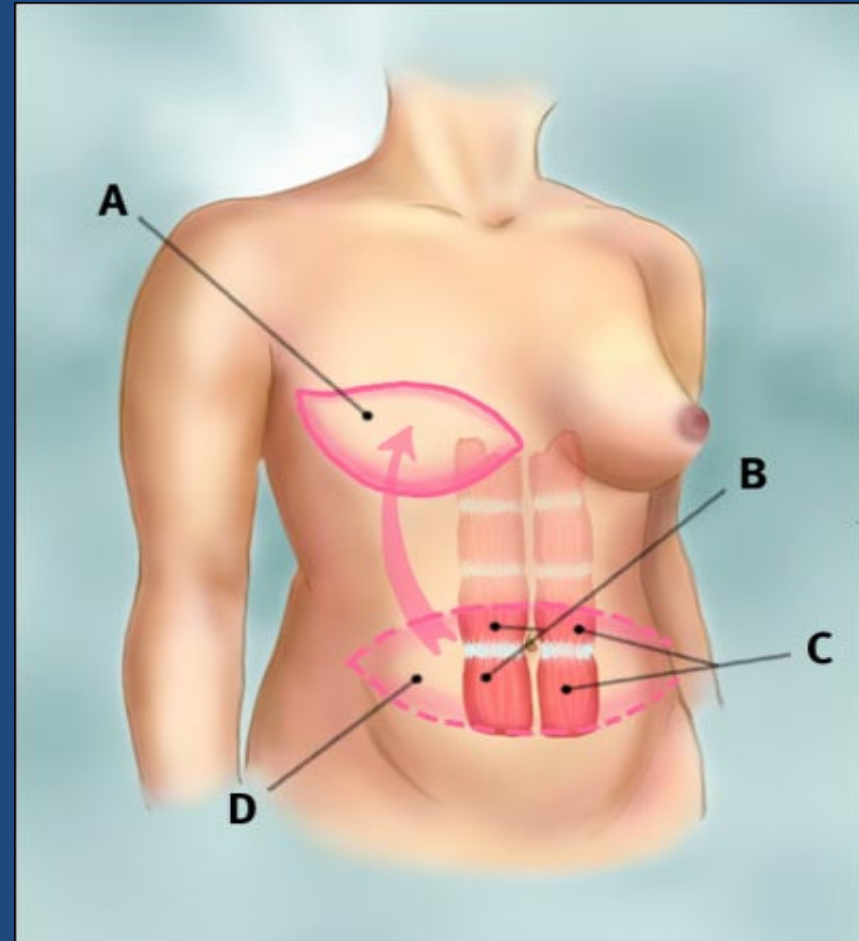
Expanders - How They Impact Your Movement



Courtesy of www.breastcancer.org

TRAM/DIEP Flap Surgery

- Studies indicate that women who receive TRAM flaps are at increased risk for persistent problems with abdominal pain and tightness at least 2 years after surgery.



Breast Reconstruction

- TRAM or DIEP Flap surgeries constitute major abdominal surgery and are correlated with post-op pain and strength deficits.
- Exercise Implications:
 - Will have weakened abdominal muscles, slower to recruit at first
 - Longer recovery – will be generally weaker with decreased endurance.

Rehab and Recovery

After the Acute Phase is Over

Who Needs Cancer Rehabilitation?

- People who have had or will have surgery
- People who have had or will have chemotherapy
- People who have had or will have radiation



Physical Therapy

- There is robust evidence that physical therapy and exercise can:
 - Speed functional recovery after surgery
 - Reduce chemotherapy-related fatigue and nausea
 - Maximize range of motion
 - Reduce and eliminate pain during all segments of treatment
 - Improve perceived quality of life
 - Help moderate weight gain

Priorities

- Reduce swelling
- Regain range of motion
- Regain strength
- Return to prior level of function

Physical Therapy

- Physical therapy following mastectomy with or without reconstruction is vital in helping you regain functional mobility, decrease pain and reduce swelling

Physical Therapy

- In your first visit your PT should:
 - Look at your surgical site
 - Assess your pain and swelling
 - Assess your current mobility
 - Take measurement of your arm and shoulder
 - Assess your posture
 - Talk about a plan to get you back to where you want to be in terms of function and your activities of daily life.

Physical Therapy

- Everyone has different rehab needs -some people need 4-5 visits and they are done and others need to be followed throughout chemotherapy and radiation.
- It depends on your prior level of function, your level of involvement and the type of surgery that you have.
- Our goal is to get you back to all the things you love to do in the safest and most efficient way possible.

Physical Therapy

- Nothing we do in physical therapy should cause you increased pain
- Physical therapy for breast surgery is very different than what you would experience for an ACL, or rotator cuff surgery rehab
- Most people leave PT feeling better, with less pain, more energy and more movement

Expectations of Recovery Time

- Defining Recovery is Important
- Acute Recovery from surgery is when you are out of the critical post-op risk window
- Healing and Full Recovery is VERY DIFFERENT
- Be patient and set realistic goals

What if I Am Long Past Surgery?

Physical Therapy Can Help Address:

- Pain
- Fatigue
- Scarring and fibrosis
- Deconditioning/loss of function
- Swelling
- Impaired Balance
- Lymphedema
- Postural imbalance due to surgery
- Difficulty with walking and functional activities

Exercise and Cancer Recovery

- A review of 36 studies of cancer and quality of life found that aerobic and resistance exercise during or following cancer treatment resulted in improvements in :
 - quality of life
 - exercise capacity
 - flexibility
 - body composition
 - fatigue
 - muscular endurance
 - Pain, nausea, diarrhea, sense of control, depression, self-esteem, and life satisfaction were also improved

Courneya KS, Mackey JR, Jones LW. Coping with Cancer: Can Exercise Help? The Physician and Sportsmedicine (28)5, 2000.

Physical Activity and Survival

- A study of almost 3000 women with stage 1-3 breast cancer who exercised 3-5 hours per week at average pace of 2-2.9mph.
- Improved their survival rate from breast cancer and overall mortality from other causes by 28-40% compared to less active breast cancer patients studied.
- Interestingly, the benefits were independent of the participant's prior activity level.

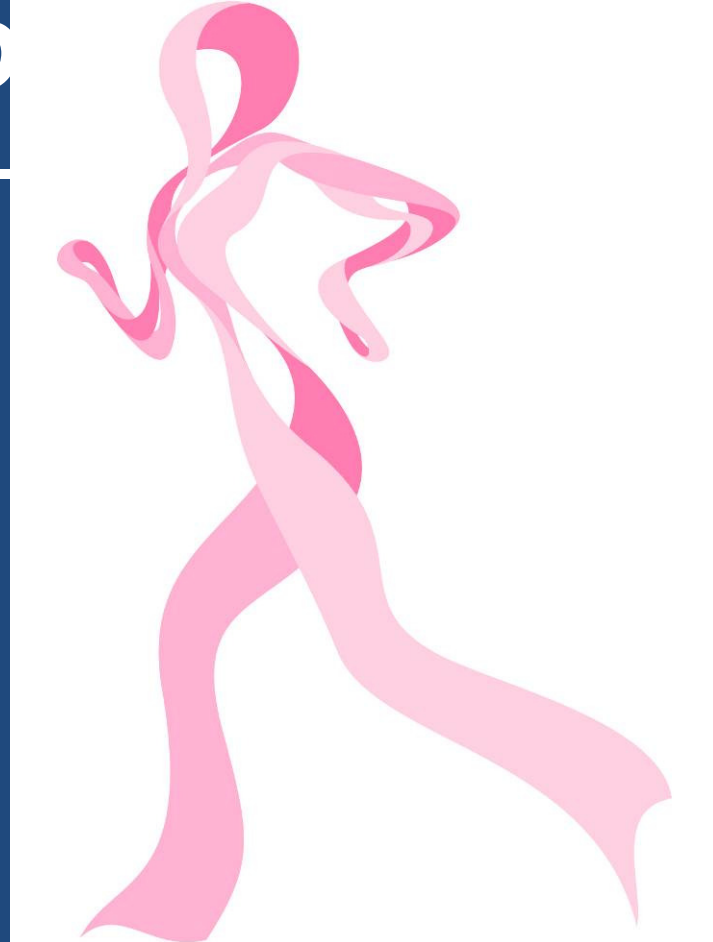
Why Rehab?

- People often say they feel like their bodies failed them when they got cancer – why should they exercise or go through rehab?
- The answer is simple – exercise and rehab are the tickets to getting back to the things they love. It is also the ticket to getting back in touch with their bodies. A strong, pain free body will allow patients to fully recover, both physically and emotionally.

Why Rehab?

- The concept of “recovery” needs to change – there is no reason someone who has had breast cancer cannot return to whatever it is they loved to do before he or she had cancer – and much more.
- Our bodies have an amazing healing capacity – and with help, they can be even better!

Questions?







Lymphedema

Lymphedema

- Lymphedema is an abnormal collection of protein and fluid in the tissues that can occur in the arm and/or breast.
- Risk factors for lymphedema include having lymph nodes removed during surgery and undergoing radiation.

Lymphedema

- The risk is greater with axillary lymph node dissection as compared to sentinel lymph node biopsy.
- However, this does NOT mean that if you have had a significant number of nodes removed that you will automatically get lymphedema.

Lymphedema

- Physicians and therapists used to warn patients about doing ANY exercise, thinking it would cause lymphedema in these patients.
- Current research shows that supervised exercise DOES NOT increase a patient's chances of getting lymphedema, if performed correctly.

What Does that Mean for Exercise?

- Start with VERY low weights and GRADUALLY ramp up. It will seem very easy at first for patients, but it is important to have a very gradual increase.
- Patients with existing lymphedema can wear a compression sleeve while exercising, or use Manual Lymphatic Drainage before and after exercise to help control swelling.
- Shorter, more frequent bouts of exercise are often effective for this group – example: weeding – don't do whole garden in one day.

Lymphedema

- A patient is NOT protected from lymphedema by sitting on the couch.
- A strong, rehabilitated arm is your best defense against lymphedema.

