

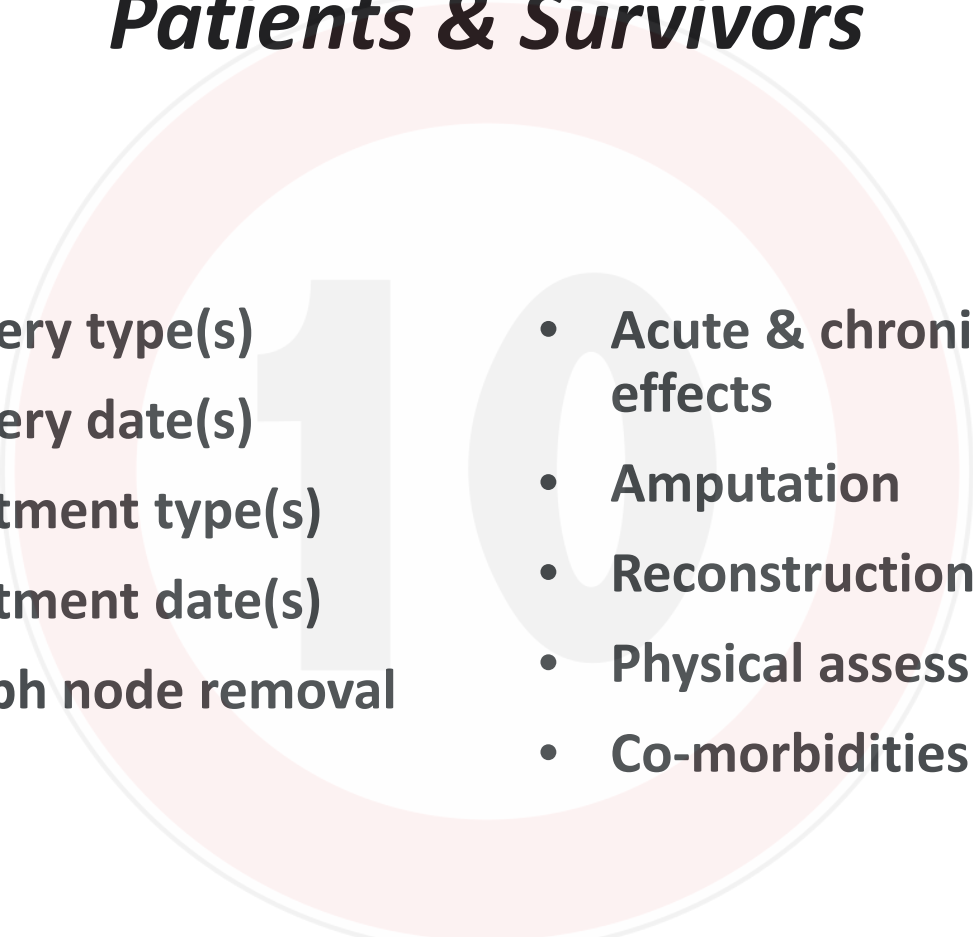
2021 NSCA PERSONAL TRAINERS VIRTUAL CONFERENCE

#NSCPT21

CONFLICT OF INTEREST STATEMENT

I have no actual or potential conflict of interest in relation to this presentation.

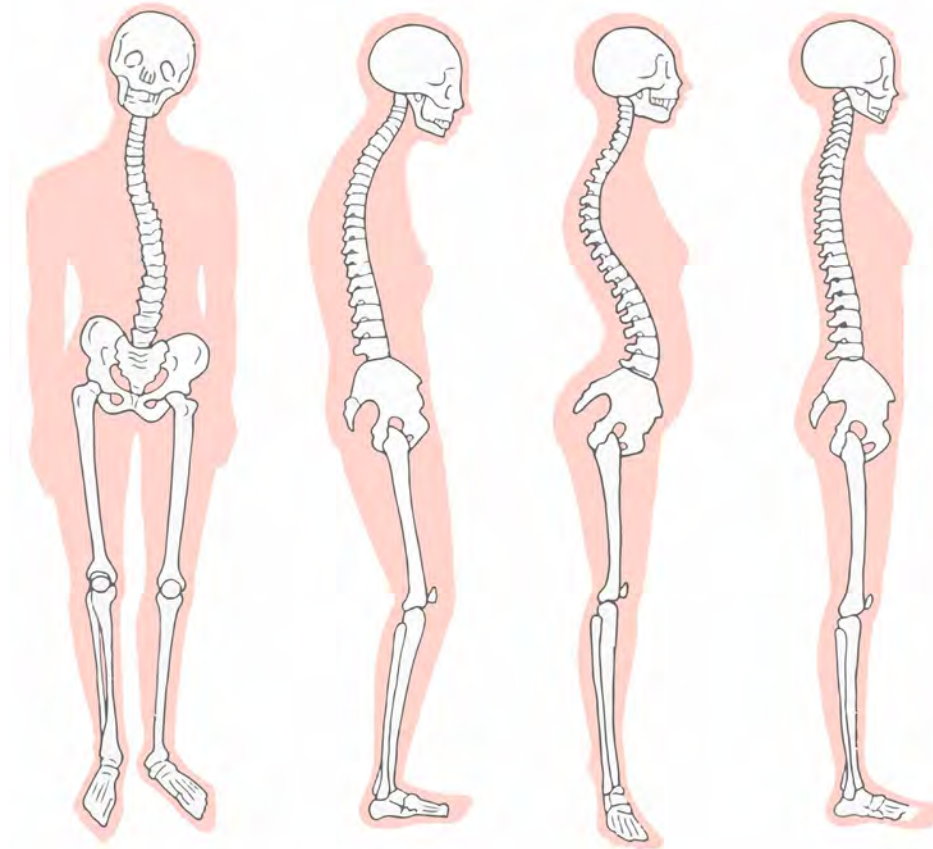
The TEN Things You MUST Know When Working with Cancer Patients & Survivors

- 
- Surgery type(s)
 - Surgery date(s)
 - Treatment type(s)
 - Treatment date(s)
 - Lymph node removal
 - Acute & chronic side-effects
 - Amputation
 - Reconstruction
 - Physical assessment
 - Co-morbidities

SURGERY TYPE(S)

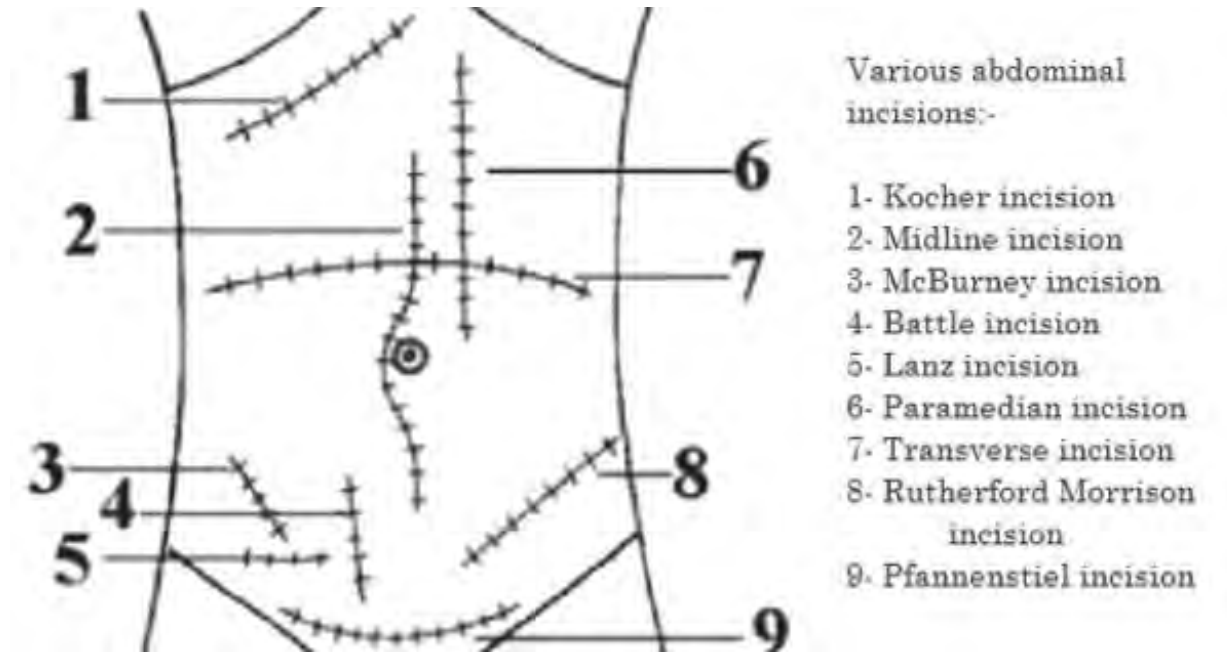
You must familiarize yourself with the type of cancer your client had and the details of the type of surgery(s) that they had.

- Where is the incision(s)?
- Were organs removed?



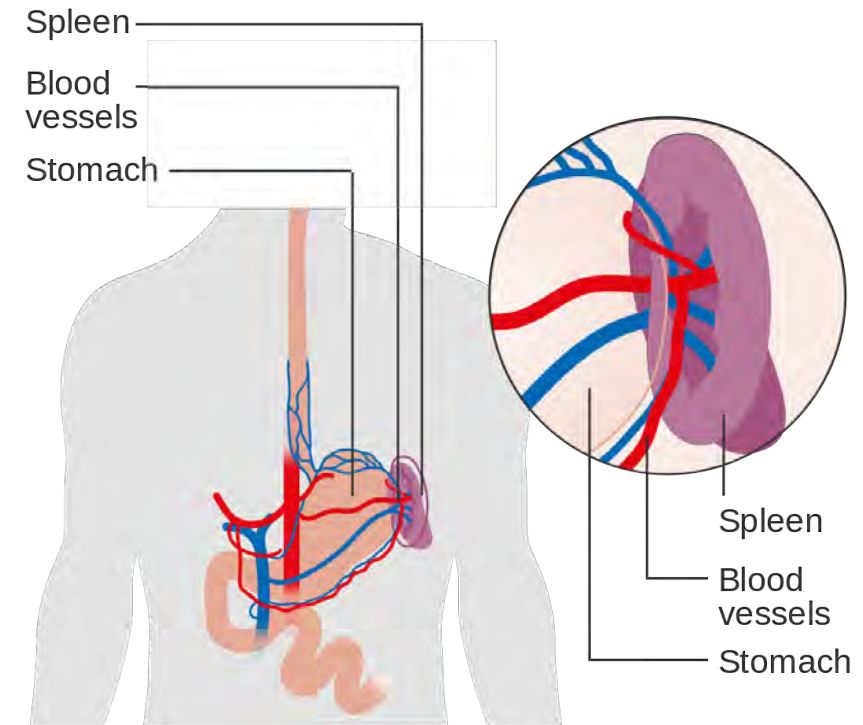
How will the surgical incision, scar tissue, and potential adhesions affect posture?

What does the direction and location of the incision(s) dictate as far as exercise programming?



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What is your biggest concern if the spleen is removed?
How might that affect exercise programming?



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What is your biggest concern if the stomach is removed?
How might that affect exercise programming?



What is your biggest concern if the pancreas is removed?
How might that affect exercise programming?



What is your biggest concern if the thyroid is removed?
How might that affect exercise programming?



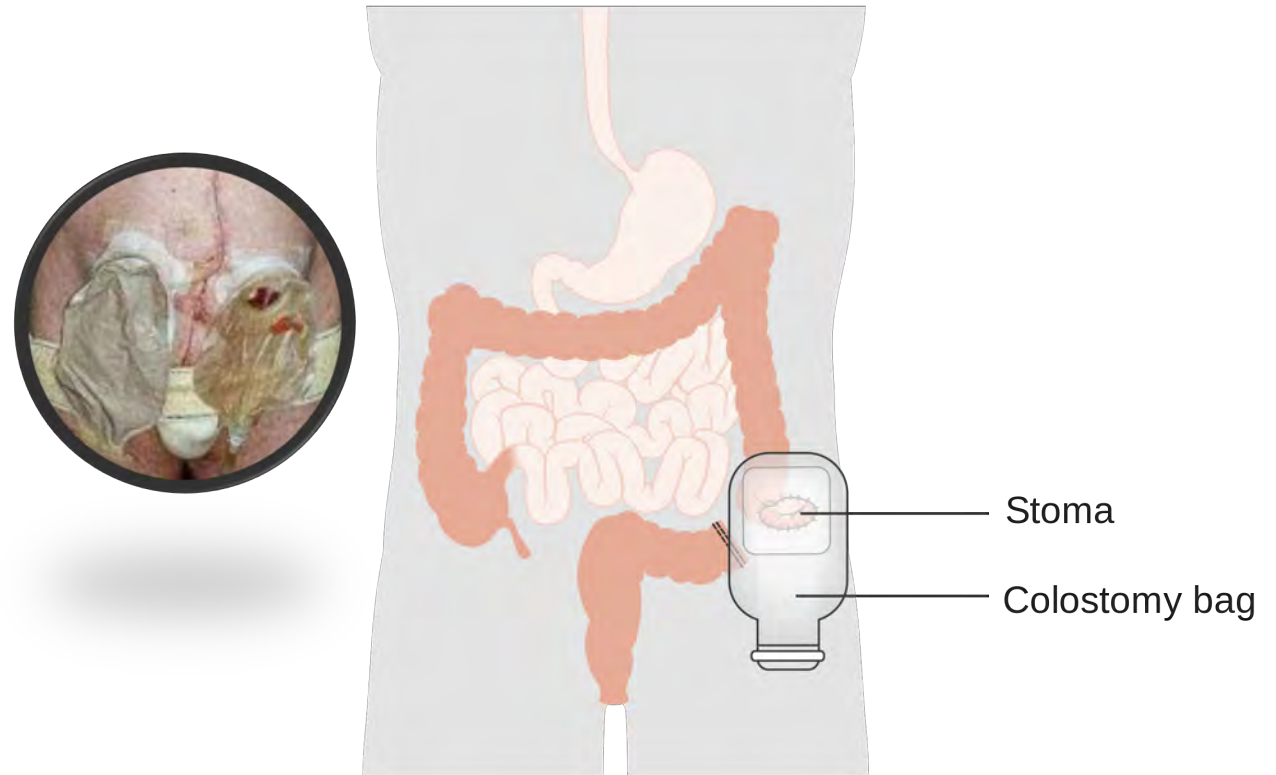
What is your biggest concern if a lobe(s) of the lung is removed?

How might that affect exercise programming?



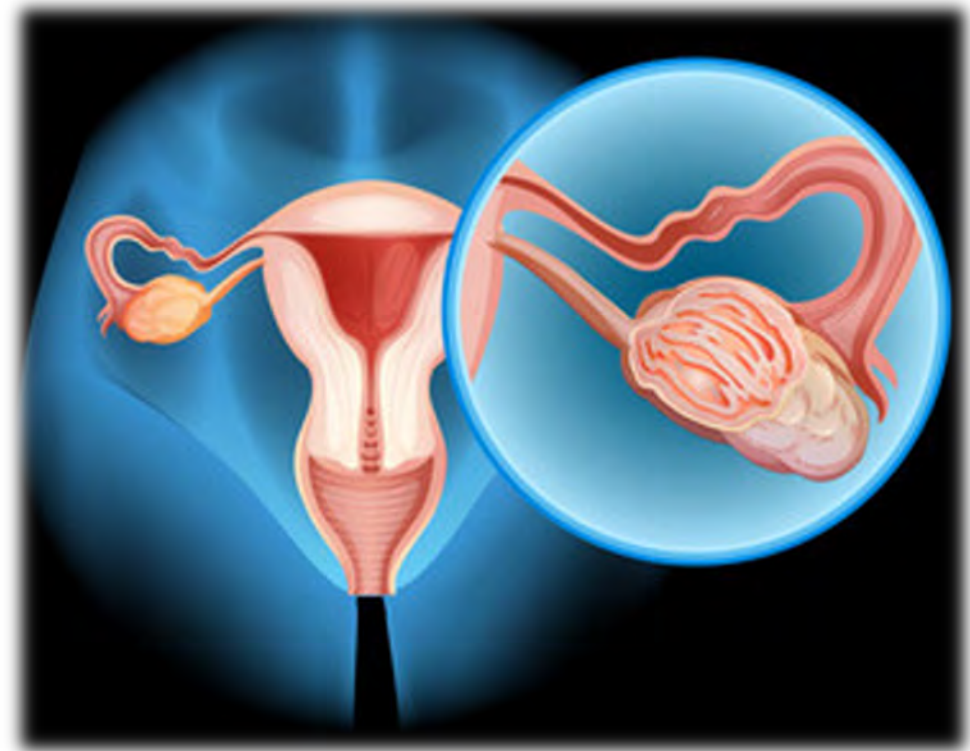
What is your biggest concern if the bladder, colon, or rectum is removed?

How might that affect exercise programming?

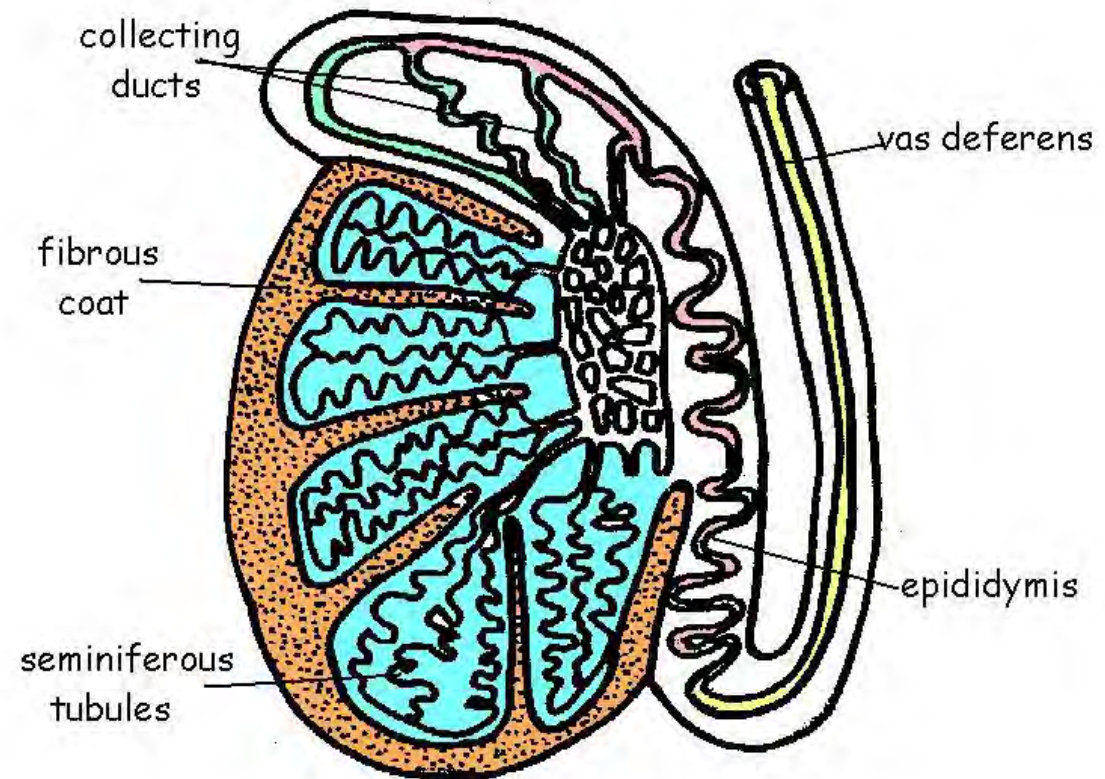


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What is your biggest concern if the ovaries are removed?
How might that affect exercise programming?



What is your biggest concern if the testicles are removed?
How might that affect exercise programming?



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SURGERY DATE(S)

Knowing the date(s) of their surgery(s) provides critical information for exercise programming.

- Exercise limitations
- Contraindications
- Progression/regression

Recovery Times

- 6-weeks for most surgeries
- 12-weeks for larger/open surgeries
- Less time for laparoscopic



You MUST obtain Medical Clearance Prior
to Your FIRST session



Range of Motion



Did You Know.....



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Did You Know.....



Did You Know.....



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TREATMENT TYPE(S)

You must familiarize yourself with the type of treatment(s) your client has completed or is currently undergoing.

- Acute and chronic side effects
- Contraindications
- Progression/regression

Chemotherapy



- Cycle schedule
- Implanted or external port/PICC line
- No exercise on treatment day

Acute Side-effects

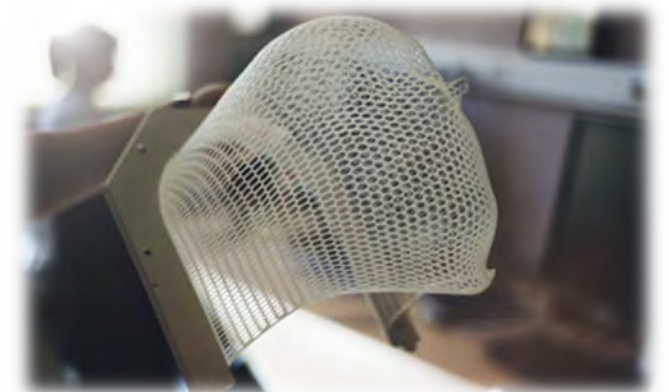
- Vomiting & diarrhea
- Immunocompromization
- Cancer cachexia
- Fatigue
- Pulmonary toxicity
- Mouth sores, taste and smell changes, and loss of appetite
- Pain
- Chemo-brain
- Peripheral neuropathy
- Instant menopause

Chronic Side-effects

- Pulmonary toxicity
- Increased risk of diabetes, osteoporosis, and future cancers
- Chemo-brain
- Peripheral neuropathy
- Menopause



Radiation



- Burns/skin irritations
- Severe fatigue
- Swimming pool

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Acute Side-effects (depends on location)

- Fatigue
- Burns/skin irritations
- Lymphedema
- Nausea/vomiting
- Radiation pneumonitis (cough, fever, fullness of the chest)



Chronic Side-effects (depends on location)

- Pulmonary toxicity
- 2nd cancers
- Lymphedema
- Menopause

Hormonal Therapy

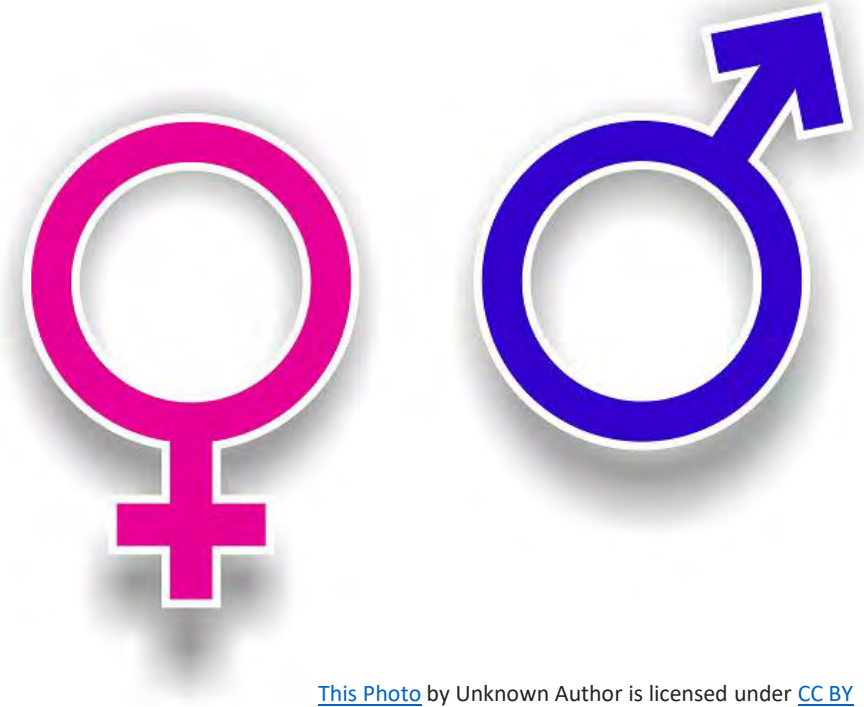


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Acute Side-effects (varies with gender/medications)

- Fatigue
- Weight gain
- Gynecomastia
- Strength/muscle loss
- Bone/joint pain



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Chronic Side-effects (varies with gender/medications)

- Osteoporosis
- Menopause
- Endometrial/uterine cancer
- Cataracts
- Stroke
- Heart disease
- Difficulty concentrating
- Memory changes
- Strength/muscle loss

TREATMENT DATE(S)

Knowing the date(s) of their treatment(s) provides critical information for exercise programming.

- Exercise limitations
- Contraindications
- Progression/regression

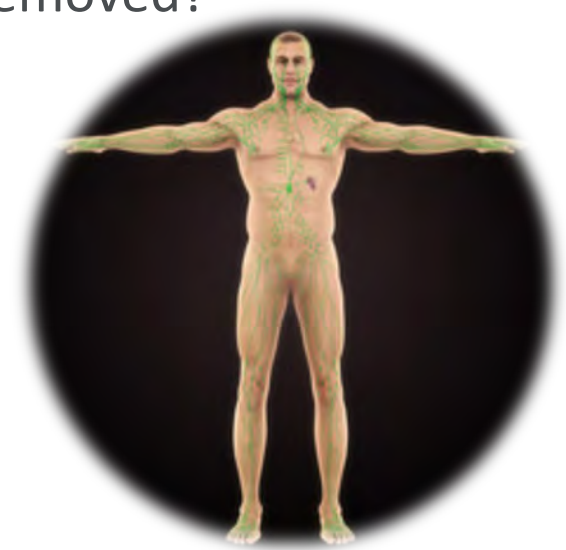


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LYMPH NODE REMOVAL

This may be the most overlooked question when working with cancer patients and survivors. This is a critical piece of information!

- Where were lymph nodes removed?
- How many lymph nodes were removed?
- Lymphedema precautions
- Compression garments
- Lymph drainage exercise
- When to call the doctor



UPPER BODY

Lymphatic Drainage Exercises for Cancer



BREATHING

One of the most important and often over-looked components of exercise is breathing. Not only does breathing allow precious oxygen to be circulated through the bloodstream, but it is also effective for moving fluid through a gentle pumping action of the abdominal muscles. The fluid is pumped through the central lymphatic vessel in the chest cavity, stimulating the flow of lymph. When you breathe in, using your abdominal muscles, the pressure in the chest cavity changes, because the belly breath moves your diaphragm.

PELVIC TILT

Lie on your back with your knees bent and feet flat on the floor. Tilt your hips so that you are able to press the small of your back against the floor. Pause for several seconds then release the contraction. Repeat 5-10 times.



MODIFIED SIT-UP

Lie on your back with your knees bent and feet flat on the floor. Keep your neck in neutral and your chin pointing to the ceiling. As you exhale, lift up your chest and shoulders, pausing when you feel your abdominal muscles tighten up. Slowly lower yourself back to starting position (trying not to rest between repetitions). Repeat as many times as you can comfortably.

NECK STRETCHES

Begin by standing or sitting erect. Exhale and turn your head slowly to the right, looking over your shoulder. Inhale as you return to center. Repeat this to the left. Next, tilt your head to the right, allowing your chin to drop toward your shoulder. Maintain this position for 15-30 seconds, breathing regularly. Slowly bring your head back to center. Repeat this to the left. Finally, tilt your head to the right, allowing your ear to drop toward your shoulder. Maintain this position for five seconds, breathing regularly. Slowly bring your head back to center. Repeat to the left.



SHOULDER SHRUGS

Shrug both shoulders, lifting them towards your ears as you inhale. Exhale, and return to a relaxed position. Next, exhale and press your shoulders down as far as possible, pause. Inhale and return to the relaxed position. Repeat 5-10 times.

Name _____

Title or Certification _____

555-555-5555

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SHOULDER ROLLS

Lift your shoulders up to your ears then rotate your shoulders back and down, making a smooth, continuous motion. Repeat 5-10 times. Repeat in the other direction.

SHOULDER BLADE SQUEEZE

Bend your elbows to a right angle, parallel to the floor. Exhale and pull them towards the center of your back. Squeezing the shoulder blades together, pause, inhale and return to starting position. Repeat 5-10 times.



ISOMETRIC CHEST PRESS

Place the palms of your hands together, with the elbows bent and arms parallel to the floor at shoulder level. Exhale and push your hands firmly together. Pause, inhale and relax. Repeat 5-10 times.

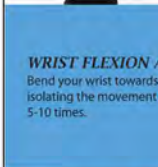
SHOULDER CIRCLES

Hold your arms at shoulder height, parallel to the floor, with palms facing down make small circles forward and then backward. 6-8 times in each direction. Repeat 5-10 times.



WRIST CIRCLES

Rotate your fists in small circles, isolating the movement to the wrist only. Repeat 5-10 times in one direction, then in the other.



WRIST FLEXION AND EXTENSION

Bend your wrist towards you, then away from you, isolating the movement to the wrist only. Repeat 5-10 times.



FIST CLENCH

Open your hands and stretch your fingers, spreading them apart. Then slowly clench each hand to make a fist. Hold for five seconds, breathing regularly, and release. Repeat 5-10 times.



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AMPUTATION

If your client has had an amputation of a limb or a muscle it will naturally have profound physical and psychological side-effects.

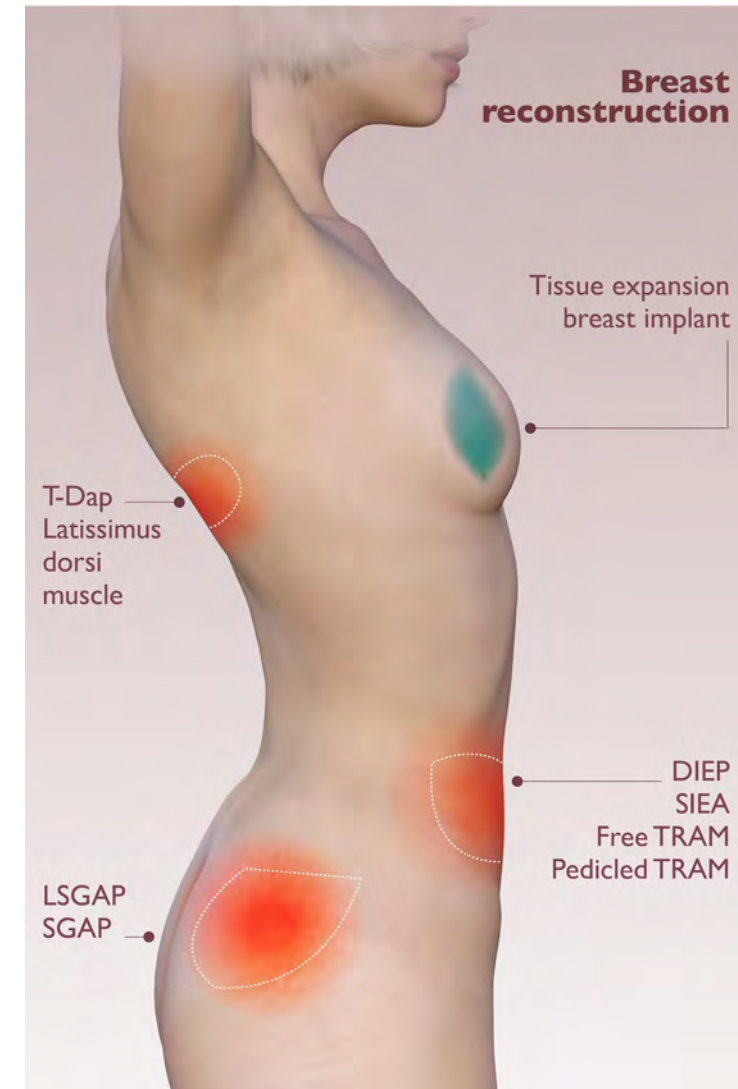
- Where is the amputation(s)?
- What are the potential acute/chronic side-effects?
- Physical limitations
- Modifications
- Contraindications
- Progression/regression



RECONSTRUCTION

Knowing the date(s) of their surgery(s) provides critical information for exercise programming.

- Was a muscle used?
- Exercise limitations
- Contraindications
- Progression/regression



PHYSICAL ASSESSMENT

“Every ‘body’ tells a story... let the body speak to you.” – Vladamir Janda

- Muscle imbalances
- Range of motion limitations
- Balance issues
- Movement patterns

CO-MORBIDITIES

In addition to the acute and chronic side-effects of surgery and treatment, you must factor in your clients' co-morbidities as well.

- Exercise limitations
- Contraindications
- Progression/regression

Surgery + Treatment +
Lymphedema
+ Assessment +
Health History
= Personalized
Exercise Programming



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