# Oncology Rehab Perspective: Wellness During and After Colorectal Cancer Treatment

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# Objectives

- What is Oncology Rehab?
- Common Side Effects
- Cancer Related Fatigue
- CIPN
- Lymphedema
- Pelvic Floor Therapy
- Sexual Health
- Patient Story

- Handouts are available in electronic format

# What Is It?

**Oncology Rehabilitation** is a multidisciplinary approach aimed at mitigating the side effects of cancer and its treatment.

**Providers**:

- Physical Therapy
- Occupational Therapy
- Speech Therapy
- Acupuncture
- Oncology Yoga
- Registered Dietitian
- Massage Therapy
- Integrative Medicine

# Common Side Effects

- Fatigue
- Pain
- Neuropathy
- Lymphedema
- Weight gain
- Bowel or bladder dysfunction
- Sexual dysfunction
- Impaired cognitive function
- Decreased bone density
- Scar tissue
- Decreased mobility

# Cancer Related Fatigue (CRF)

A distressing, persistent, subjective sense of physical, emotional, and/or cognitive tiredness or exhaustion related to cancer  treatment that is not proportional to recent activity and interferes with usual functioning.

Reported to be more distressing than:

pain, nausea & vomiting.

# Physical Activity and Cancer

*Common Research Features:*

- Compares low to high activity
- Looks at all-causes and cancer-related mortality
- Looks at pre/post diagnosis activity levels

*Conclusions:*

- Increased activity levels are correlated with improved outcomes
  - QOL, mortality, adenomas/polyps
- Moderate activity levels are adequate
  - 15-18 MET/Hr/wk
- Reduction in risk or improved survival range from **30-50%** depending on study
- Impact appears to be dose-dependent

| Rating | Perceived Exertion |
|---|---|
| 6 | No exertion |
| 7 | Extremely light |
| 8 | |
| 9 | Very light |
| 10 | |
| 11 | Light |
| 12 | |
| 13 | Somewhat hard |
| 14 | |
| 15 | Hard |
| 16 | |
| 17 | Very hard |
| 18 | |
| 19 | Extremely hard |
| 20 | Maximal exertion |

# Chemotherapy Induced Peripheral Neuropathy(CIPN)

*Most Common With:*

- Taxanes
- Platinum Compounds
- Vinca Alkaloids

*Prevalence:*

- 68% in first month
- 30% @ 6 months
- Oxaliplatin and Taxanes as high as 80% beyond 6 mo after chemo

*Symptoms are usually sensory, but can be motor:*

- Pain
- Numbness
- Weakness
- Decreased balance
- Gait disturbances

Duloxetine can help with painful CIPN, no agents for non-painful CIPN per ASCO guidelines(Haas, 2022)

# Lymphedema

Lymphedema is an abnormal accumulation of protein-rich fluid in the interstitium which causes chronic inflammation, reactive fibrosis, and adipose tissue proliferation of the affected areas.

*Oncology Causes:*

- Compression from tumor
- Surgical removal of lymphatic structures
- Impaired lymphatic function due to radiation or nodal disease

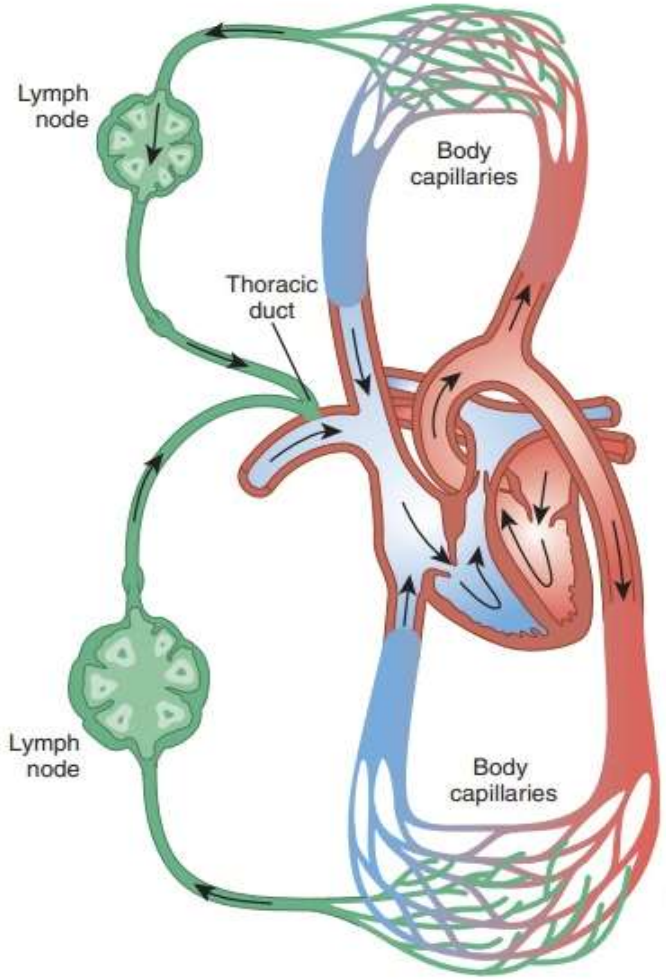



**FIGURE** The lymphatic system transports fluids through a network of vessels.

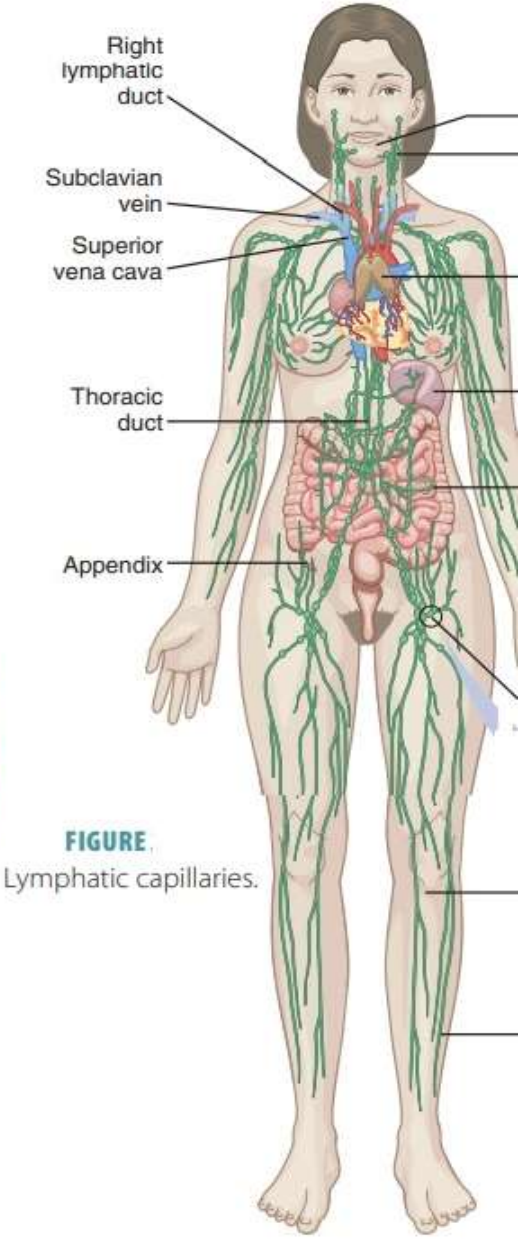
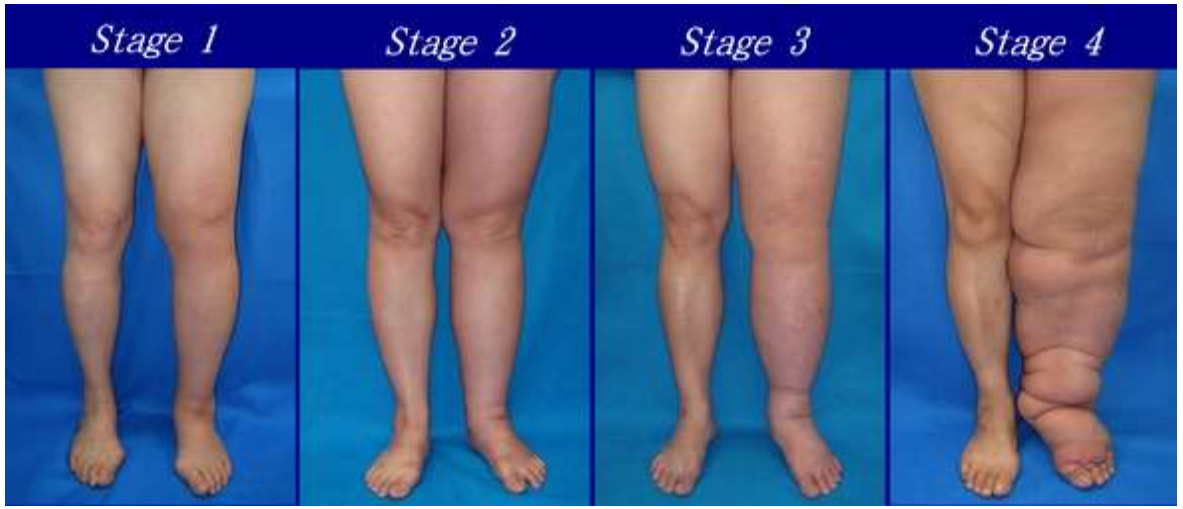



**FIGURE** Lymphatic capillaries.

# Lymphedema

*What to look for:*

- Fullness, achiness, heaviness in the affected region
  - *Abdomen, pelvis, genitals, legs, feet*
- Indentations or creases from clothing or jewelry that don't resolve
- Can develop early with treatment or several years later




*Complete Decongestive Therapy (CDT)*

- Compression
- Exercise
- Lymphatic Massage (MLD)
- Education
- Skin Care

*In a study of 900 women (older age, >5 yrs from trtmt) with colorectal, endometrial and ovarian cancer, **30%** of patients with colorectal cancer diagnosis developed leg lymphedema. It was associated with decreased physical functioning and higher odds of needing help with ADLs (Zhang 2022)*

# What is Pelvic Floor Therapy?

Pelvic Floor Therapy is a specialized type of treatment that focuses on rehabilitation of the pelvic floor muscles and surrounding structures. It is typically delivered by a Physical or Occupational therapist.

*The Pelvic Floor Muscles:*

- Help control your bowel and bladder
- Aid in sexual function
- Support the trunk muscles

These structures are often disrupted with colorectal cancer treatment and may require therapy ***BEFORE, DURING or AFTER*** treatment

# "Pain and Leaking Are Never Normal"

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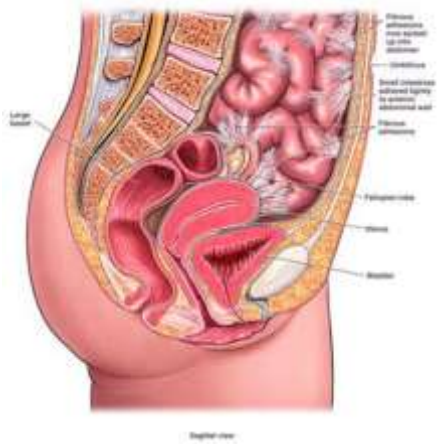
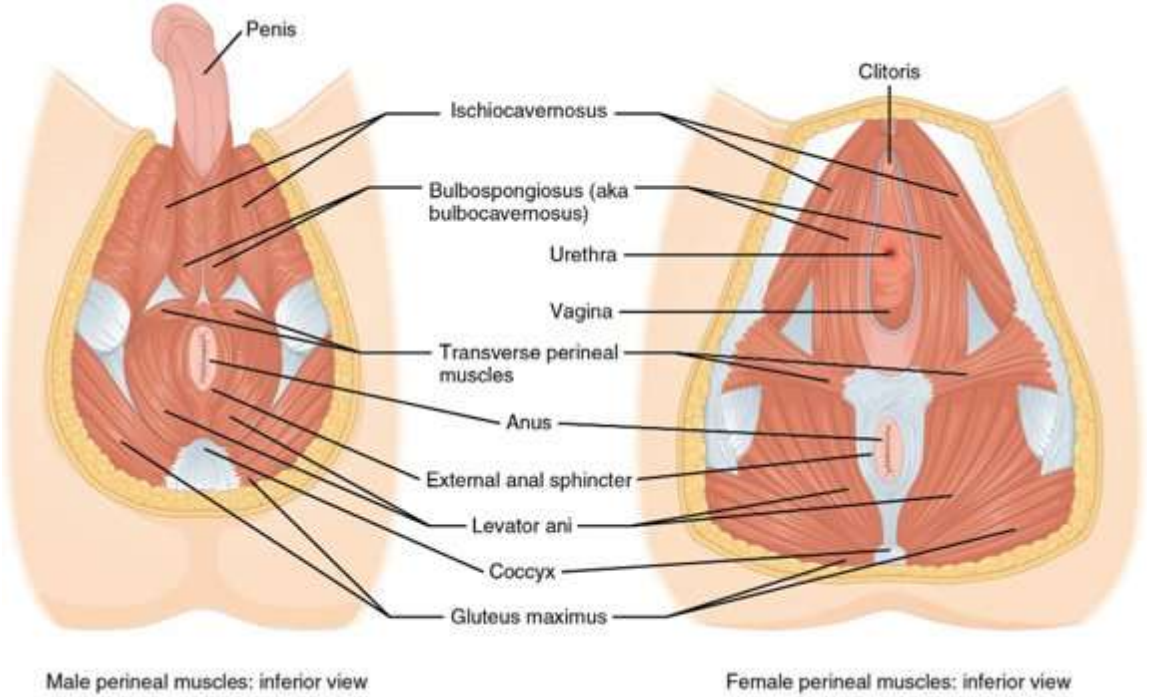
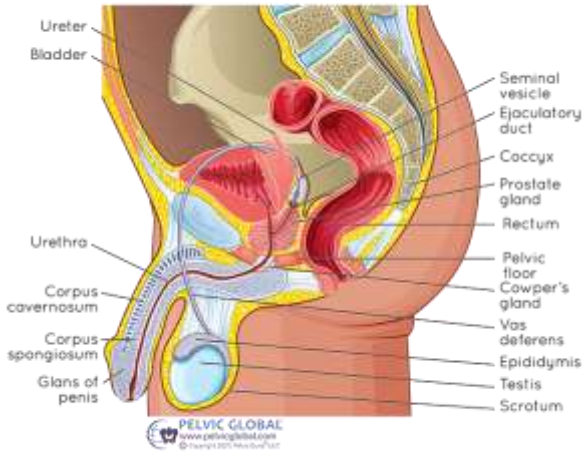
# Pelvic Anatomy

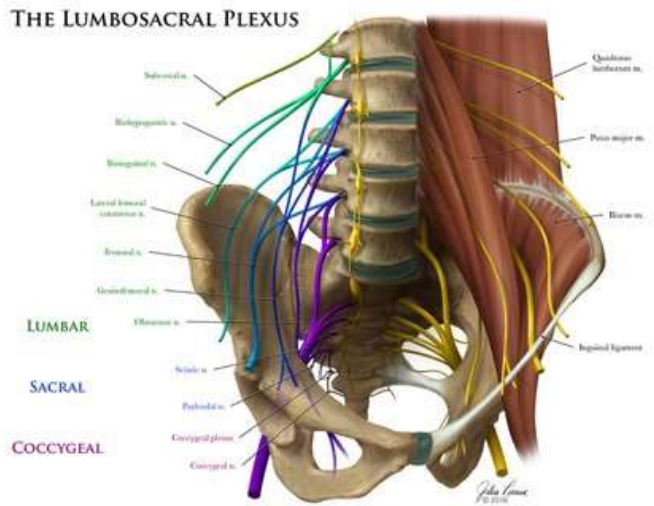





Male perineal muscles: inferior view

Female perineal muscles: inferior view



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# Pelvic Side Effects of Treatment

| Bladder | Bowel |
| --- | --- |
| • Urgency/Frequency<br>• Urinary Incontinence (stress/urge)<br>• Nocturia<br>• Slow/intermittent stream, hesitancy and straining to void<br>• Decreased sensation to void<br>• Post voiding dysfunction; retention<br>• Cystitis | • Urgency/Frequency<br>• Fecal Incontinence<br>• Pain with bowel movements<br>• Diarrhea<br>• Constipation<br>• Inconsistent stooling<br>• Incomplete emptying |

| Pelvic Symptoms | Endocrine/Chemotherapy |
| --- | --- |
| • Vaginal canal stenosis<br>• Rectal canal stenosis<br>• Soft tissue/muscle/nerve radiation fibrosis<br>• Pain - abdominal, pelvic, genital, hip<br>• Lymphedema – LE, abdominal, genital<br>• Joint Stiffness<br>• Sexual dysfunction<br>• Erectile Dysfunction<br>• Nerve entrapment or irritation<br>• Skin changes<br>• Postural dysfunction | • Fatigue<br>• Hot Flashes<br>• Vaginal dryness<br>• Dyspareunia<br>• Insomnia<br>• Muscle Weakness<br>• Nausea<br>• Joint pain<br>• Osteoporosis<br>• Heart disease |

# How Common Is It?

***Colon Cancer:***

Loose to Liquid Stool:14-45%

Fecal Incontinence: 6 – 34%

Fecal Urgency: 9-37%

Nocturnal Defecation: 20-32%

Incomplete Evacuation: 26-66%

Obstructive/Difficult Emptying: 15-71%

Needing Aid When Defecating: 14.2%

*14.3% of CC patients have urinary dysfunction that affects QOL

***Rectal Cancer:***

Fecal Incontinence: 97%

Stool Frequency: 80%

Fecal Urgency: 67%

Evacuatory Dysfunction: 47%

Gas-Stool Indiscrimination: 34%

*18.7% of RC patients have urinary dysfunction that affects QOL

LARS – lower anterior resection syndrome is present in approximately 80-90% of individuals who undergo sphincter-preserving surgery

# PT Interventions

- Full musculoskeletal exam of lumbosacral complex
- Internal and external pelvic exam (vaginal or rectal) if appropriate

| Behavioral | Musculoskeletal |
|---|---|
| • Education on normal bowel/bladder health<br>• Diet/Fluid/Fiber management<br>• Urge retraining<br>• Bladder and timed voiding training<br>• Bowel retraining<br>• Dilation Instruction<br>• Skin care – moisture/lubrication<br>• Skin checks | • ***Biofeedback training***<br>• Strengthening - kegels/hip/core/lumbar<br>• Relaxation techniques<br>• Sympathetic downtraining<br>• Manual Therapy<br>• Scar tissue massage<br>• Pelvic/hip/lumbar alignment |

***** PREHAB: prior to surgery or ostomy reversal *****

# The TRUTH about Kegels

“Repetitive contractions of the pelvic muscles that control the flow in urination in order to strengthen these muscles, especially to control or prevent incontinence or to enhance sexual responsiveness during intercourse”

When you have *LEAKAGE* with coughing/sneezing/laughing they might be indicated

When you have *PAIN* they may not be appropriate because the muscle is tight or shortened.

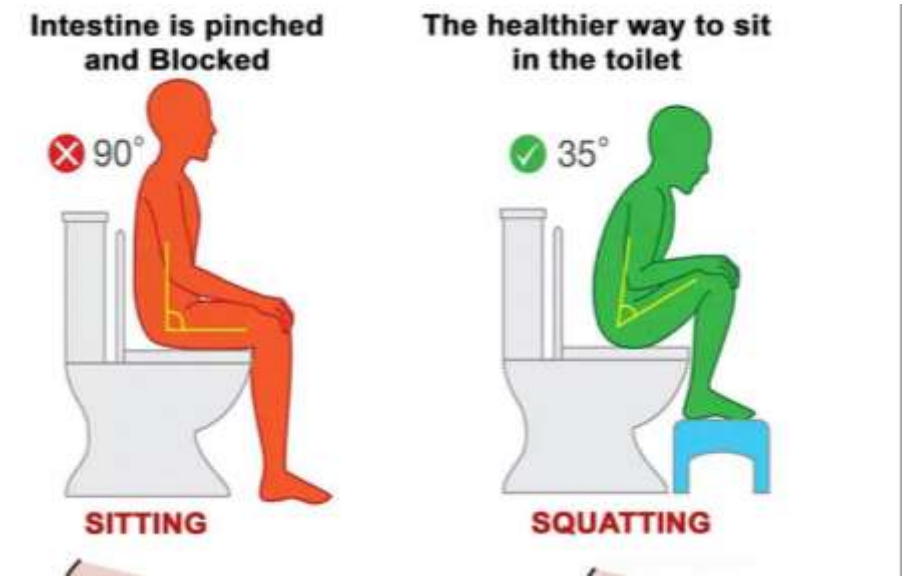
***They are NOT appropriate for everyone. It is important to get evaluated and learn how to do them correctly ****

*The Most Common Mistakes:*

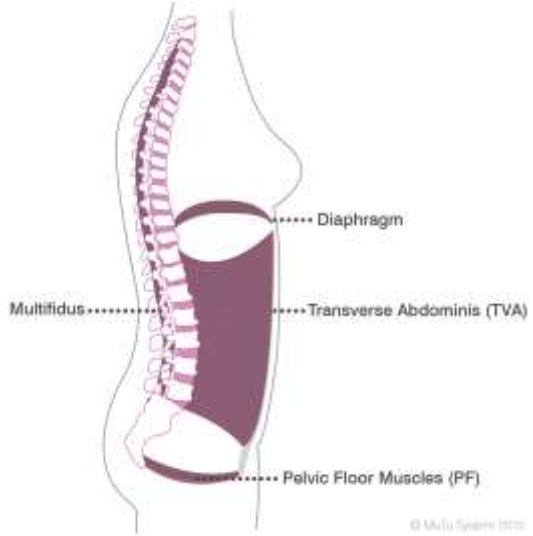
- holding your breath
- using your leg, buttock or stomach muscles
- they should not make symptoms worse or cause pain

# Tips On Bowel Health

- ***Water/Fiber Intake***
- ***Activity Levels***
- ***Bowel Massage*** – 2-3 min/day, "U" shape, lying in bed am/pm, pressure to your tolerance
- ***Toilet Posture*** – knees higher than hip, lean forward with elbows on knees, relax belly
- ***Belly Breathing*** – in nose/out mouth, belly big/belly hard
- ***Bowel Retraining*** – sit on the toilet for ~10-15 min, about 20-30 min after you eat each meal




Constipation Massage Path



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# Sexual Health

“A state of physical, emotional, mental and social well-being in relation to sexuality; it is not merely the absence of disease, dysfunction or infirmity” (WHO 1975).

***Team Approach:***

Rehab specialists

Nurse educators

Behavioral health and counseling

Sex therapists

Physicians

Physical Assistants or Nurse Practitioner

“Physiotherapists are trained to provide treatment to restore function, improve mobility, relieve pain, and prevent or limit permanent physical disabilities of patients suffering from injuries or disease” (Bureau of Labor Statistics, U.S. Department of Labor 2002)

***Sexual function is an area of QOL which undergoes disruption following a large spectrum of cancer diagnosis***

# Colorectal Cancer (CRC) and Sexual Health

CRC survivors (68%) with ostomy were more anxious and had a lower frequency of sexual intercourse than healthy volunteers (30%)

*Sexual dysfunction in CRC survivors:*

- Female: 88%
- Male: 93%

Female CRC survivors did not engage in sexual activity after treatment because of a *"physical"* issue that made it uncomfortable or difficult.

- Dyspareunia: 36-60%
- Vaginal Dryness/decreased lubrication: 67-72%

Other Symptoms Include:

- Erectile dysfunction: medication, injection trials, prosthesis, VED
- Difficulty achieving orgasm
- Decreased libido
- Fatigue
- Emotional distress/self esteem

# Muscle and Nervous System Relaxation

- Hip stretching
- Pelvic floor muscle stretching
- Walking program
- Diaphragmatic deep breathing

- Downtraining state of fight or flight
- *Re-training* the body's experience of touch
- Graded motor imagery
- Sensate focused exercises
- Communication with partner
- Mindfulness and relaxation techniques
- Meditation and yoga

# Moisturizers and Lubricants

*Moisturizer and Lubricants are different, and you may need BOTH!*

Sexual Activity

- Use a water, silicone or oil-based lubricant

Moisture

- Pick a moisturizer from the list
- External: massage into the labia, perineum, opening of the vagina and urethral opening everyday x 1-2 min
- Internal: suppository
- If using estrogen – can alternate days


** Topical estrogen if OK with your Oncologist **

# Vaginal/Rectal Dilation and Massage

Purpose: graduated sizes of plastic or silicone stretching tools to assist with opening of the vaginal or rectal canal

Goal:

- *Increase blood flow and circulation*
- *Increase tissue elasticity*
- *Improve pelvic floor muscle relaxation*
- *Decrease pain*
- *Prevent scar tissue*
- *Keep bowel and bladder function*



*Dilators or Vibrators:*

- Usually vaginal after radiation, rectal dilation indicated if pain with bowel movements long term
- Start 4 weeks after radiation - 10 min/day, 3-5x/week
- Smaller size for self-massage
- Larger size for sustained stretching and to progress towards penetrative intercourse/exams
- Try different positions for improved muscle relaxation
- External massage to the perineum and pelvic floor muscles
- Use vibration to help stimulate blood flow and tissue healing

# Pelvic Health Resources

**Websites:**

- American Cancer Society - www.cancer.org
- North American Menopause Society (NAMS) - www.menopause.org
- American Association of Sexuality Educators, Counselors and Therapists - www.aasect.org
- National Cancer Institute - https://www.cancer.gov/about-cancer/coping/self-image
- OncoLink - https://www.oncolink.org/support/sexuality-fertility/sexuality
- American Society of Clinical Oncology (ASCO) - https://www.cancer.net/blog/2017-03/your-sexual-health-and-cancer-what-know-what-do
- International Society for the Study of Women's Sexual Health - https://www.isswsh.org/
- Male Specific Resources - http://www.pivotalrehab.com/

**Pelvic Floor Therapy Near You:**

- www.pelvicrehab.com
- www.aptapelvichealth.org/ptlocator/

**Lymphedema Therapy Near You:**

- https://directory.klosetraining.com/

# Take Aways

- Oncology rehab is an essential and frequently overlooked part of colorectal cancer treatment – before, during or after (even years!)

- Exercise does *NOT* have to be high intensity, miserable and uncomfortable to combat cancer related fatigue. It does *NOT* need to look like it does on TV

- Recovery from treatment will take longer than expected, on average it will take double the amount of time you were in treatment, have patience.

- Listen to your body and speak up about your concerns – they are normal, you are not the only one, and there are resources to help address them

- Bowel, Bladder and Sexual Health are commonly affected in treatment of colorectal cancers: but *pain and leaking are never normal* - you don't have to settle for the *new normal*

# Patient Story - Diane

72 y/o female, married with 2 adult sons, vegetarian, non-smoker, worked as a textile/fashion professor at CSU for 30+ years

**April 2019:** Stage III Anal Squamous Cell Carcinoma found on colonoscopy, after blood in stool associated with firm bowel movement

**July '19:** Concurrent chemo and radiation to pelvis: Capecitabine(Xeloda)/Mitomycin, 1500mg twice daily x8 weeks

**Aug '19:** Oncology Registered Dietician

**Aug '19:** Integrative Medicine MD

**Oct '19:** Pelvic Floor and Lymphedema Therapy

**Nov '19:** Cancer Related Fatigue (CRF) Exercise Program

**Sep '20:** Stage I L breast cancer, treated with B mastectomy/SLNB, Taxol x 12 weeks, Herceptin x 1 year, adjuvant Zometa and Letrozole

**Nov '20:** Oncology Massage Therapy
**Jan '21:** Oncology Acupuncture

**To Present:** exercises 2x/week in CRF program, pilates, acupuncture and lymph massage for maintenance, gardening, cooking and has retired from CSU

# Diane's Story



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# THANK YOU!

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