

Outside the Pelvis: The Role of Rehab in Addressing Cancer-Related Sexual Dysfunction

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Relevant Disclosures

- Owner of OncoPelvic PT, LLC
- Affiliate with LymphedIVAS and Prairie Wear



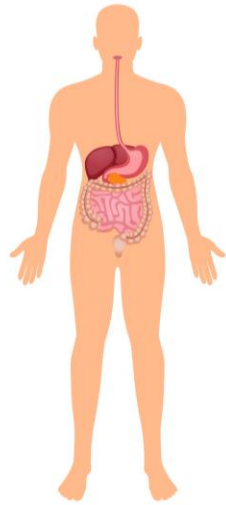
Objectives

By the end of this course, the learner will be able to:

1. Understand common sexual health side effects from cancer treatment
2. Describe rehab assessment considerations for cancer-related sexual dysfunction
3. Discuss rehab interventions to address cancer-related sexual dysfunction



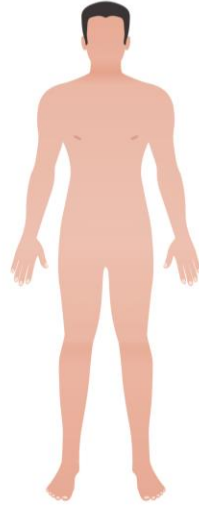
*image: a cis-female body with pelvic organs circled
and a magnifying glass focused on the pelvis*



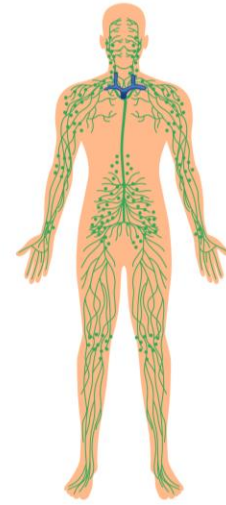
Digestive System



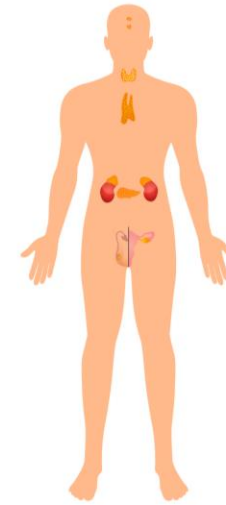
Muscular System



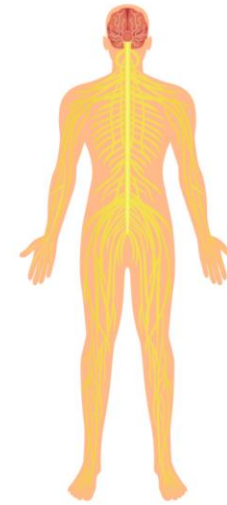
Integumentary System



Lymphatic System



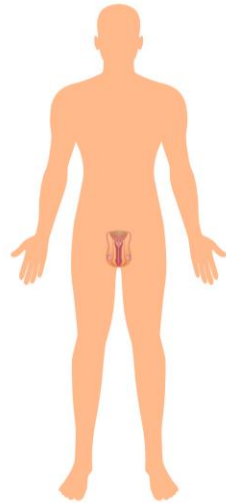
Endocrine System



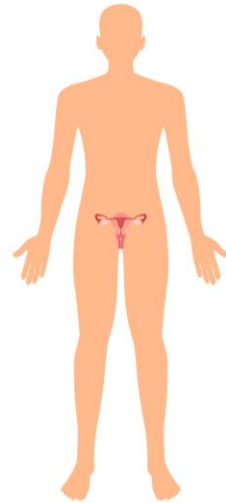
Nervous System



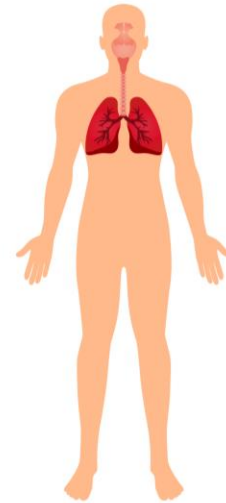
Skeletal system



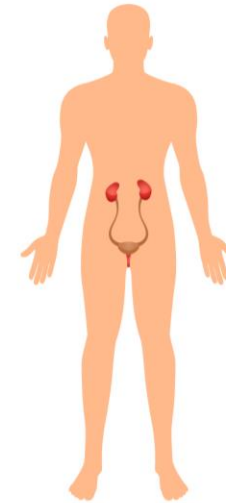
Male Reproductive System



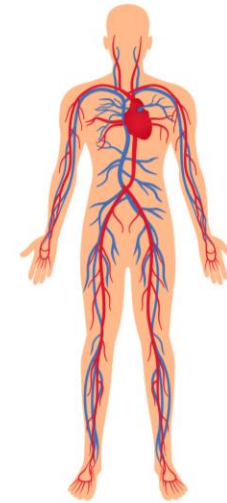
Female Reproductive System



Respiratory system



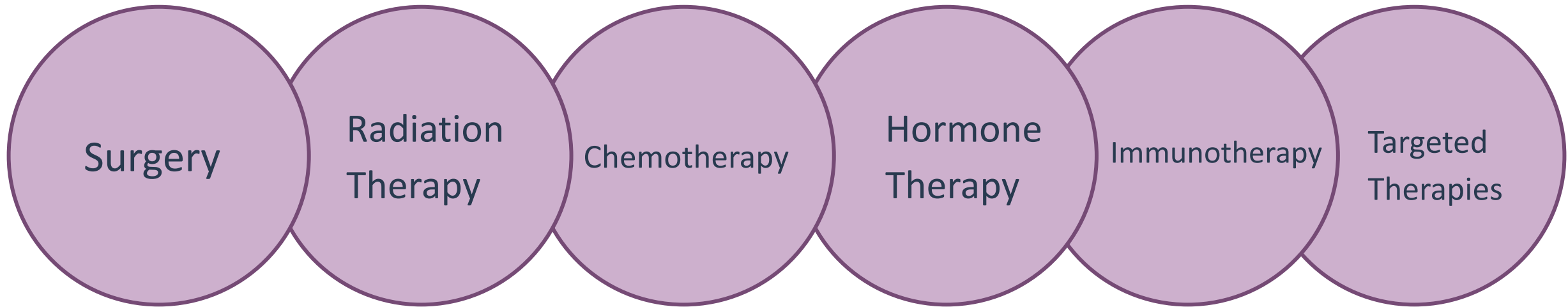
Urinary System



Circulatory system



Types of Cancer Treatment





Surgery

- Considerations:
 - Goal of Surgery
 - Location
 - Reconstruction, Revision
 - Lymph Node Removal



Image: Breast cancer survivor who had a Mastectomy and TRAM flap reconstruction



Impact of Surgery on Sexual Health

- Pain
- Scar tissue
- Lymphedema
- Nerve injury
- Weakness
- Limited range of motion
- Limited mobility
- Disfigurement
- Communication (Rhoten 2020)



Impact of Lymphedema on Sexual Health

Breast cancer (Hoyle 2022, Radina 2015, Winch 2015)

- The extent of lymphedema impacting sexual health depends on:
 - Swelling severity and location
 - Needing to wear a compression garment
 - Body image concerns

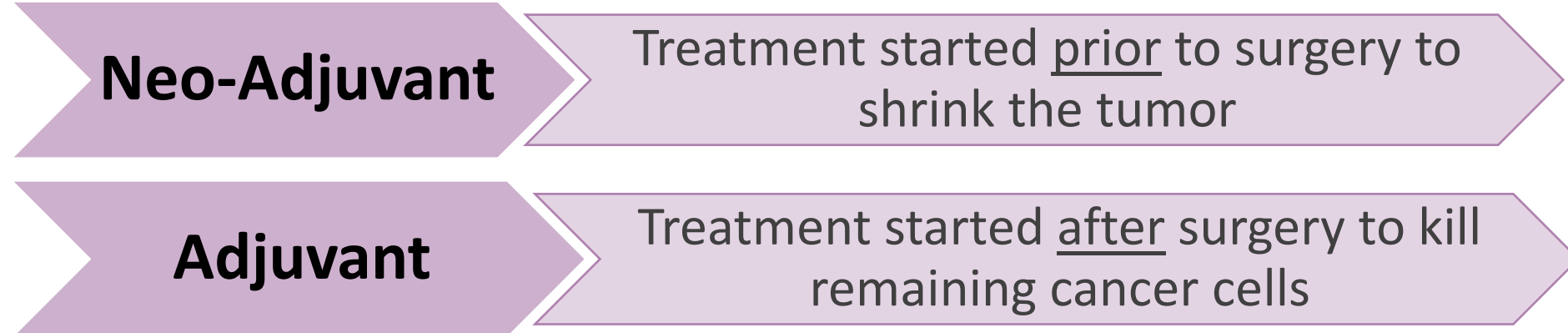


Image: a White woman with lymphedema in the right arm. The left image is before treatment, and the right image is after treatment



Radiation Therapy

High energy x-rays that destroy local cancer cells by inhibiting cell growth and division





Impact of Radiation Therapy on Sexual Health

- Cancer related fatigue
- Radiation fibrosis
- Lymphedema
- Pain
- Limited range of motion
- Nerve injury
- Weakness
- Shortness of Breath
- Disfigurement, Body image
- Communication



Impact of Radiation on Sexual Health

Breast Cancer (Boswell 2015)

- Reduction in sexual function associated with:
 - Persistent breast pain
 - Arm and shoulder discomfort and loss of flexibility
 - Lymphedema

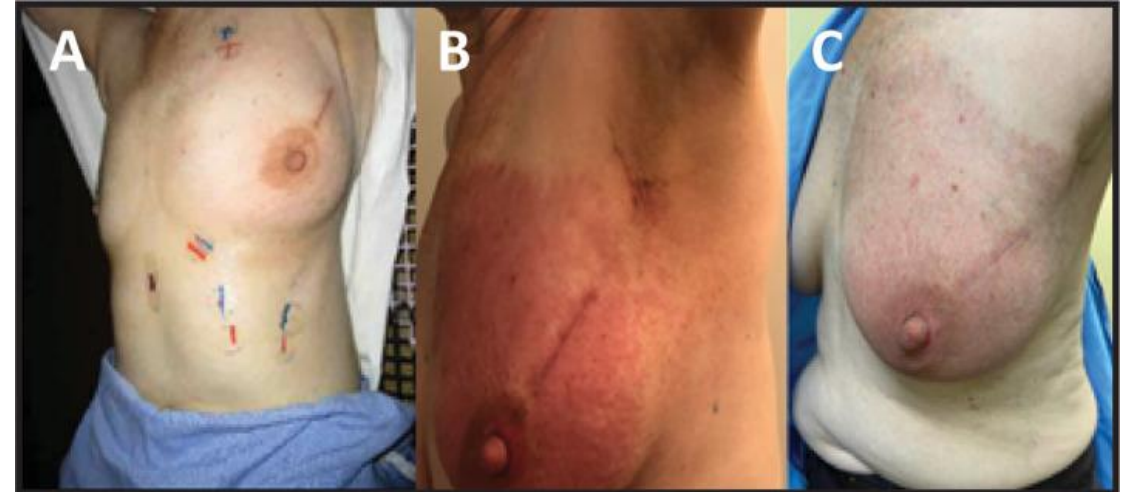


Image: shows the breast of a patient with breast cancer before, during and after radiation therapy, demonstrating stages of radiation dermatitis

Laird J, Leventhal J, Kanowitz J, Damast S. Radiation Recall Dermatitis After Capecitabine in a Patient With Triple Negative Breast Cancer. *Pract Radiat Oncol.* 2021 Nov-Dec;11(6):448-452. doi: 10.1016/j.prro.2021.06.001. Epub 2021 Jun 23. PMID: 34157449.



Impact of Surgery and Radiation on Sexual Health

Head and Neck Cancer (Caswell 2021, Covrig 2021, Rhoten 2019)

- Disfigurement can lead to lowered body image perception and limiting social interactions
- Physical limitations of facial nerve damage, impaired saliva production, communication, and limited cervical movement



Image: depicts scar tissue and radiation fibrosis on the right side of the neck of a patient with head and neck cancer

Purkayastha A, Sharma N, Sarin A, Bhatnagar S, Chakravarty N, Mukundan H, Suhag V, Singh S. Radiation Fibrosis Syndrome: the Evergreen Menace of Radiation Therapy. Asia Pac J Oncol Nurs. 2019 Jul-Sep;6(3):238-245.



Chemotherapy

Any drug that systemically treats a disease for wide control

Neo-Adjuvant

Treatment started prior to surgery

Adjuvant

Treatment started after surgery



Impact of Chemotherapy on Sexual Health

- Immunocompromised, low platelets
- Cancer Related Fatigue
- Changes in mood and libido
- Chemotherapy Induced Peripheral Neuropathy (CIPN)



Impact of Chemotherapy on Sexual Health

Various cancer diagnoses (Reimer 2023)

- Chemotherapy can cause sensory symptoms of the genital organs and sexual dysfunction by damaging genital organ nerve fibers
- Chemotherapy and hormonal therapy can trigger hormonal disruption leading to sexual dysfunction
- CIPN affects hands and feet, impacting use in sexual activity

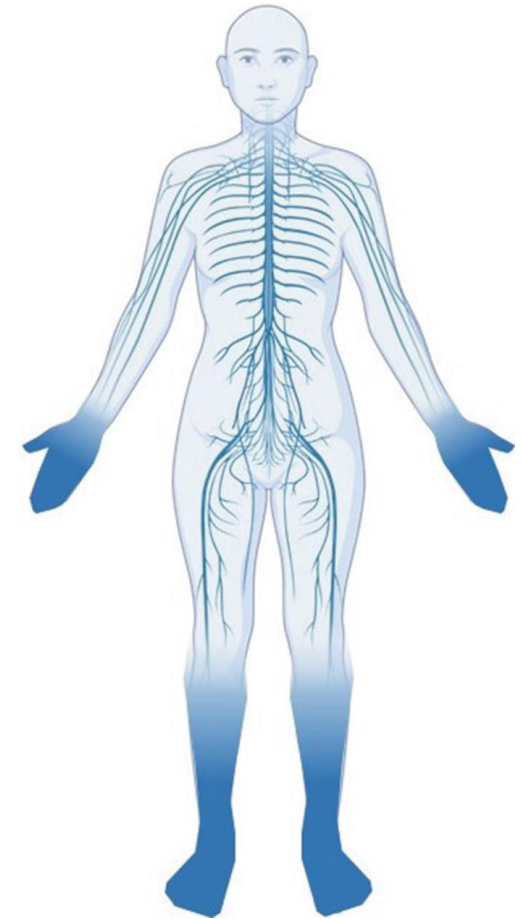


Image depicts stocking-glove distribution of CIPN



Hormone Therapy

Used for tumors that are fueled by hormones (estrogen, progesterone, or testosterone) to grow

Drugs or surgical interventions to reduce the amount of hormones in the body or stop them from acting on cancer cells.



Impact of Hormone Therapy on Sexual Health

- Fatigue (Paiva 2016)
- Arthralgia (Blumer 2023)
- Changes in mood and libido
- Worsening menopause symptoms including hot flashes
- Weight gain → body image



Targeted Therapy

Treatment that targets proteins that control how cancer cells grow, divide, and spread.





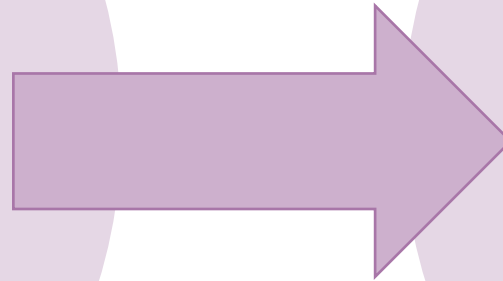
Impact of Targeted Therapy on Sexual Health

Lung Cancer (Florez 2023)

- Sexual Health Assessment in Women with Lung Cancer (SHAWL) Study
- Common reasons negatively affecting lung cancer survivors' satisfaction with their sex life: **fatigue 40%**, feeling sad/unhappy 28%, issues with partner 22%, and **shortness of breath 15%**



When should you start
the conversation with
cancer survivors?



Most patients want
information about
sexual health at the
time of diagnosis and
treatment planning

Rhoten 2020



Subjective Examination

- Past medical, surgical, and social history
- h/o abuse, trauma, PTSD
- Review labs and imaging
- Cancer history
 - Primary cancer, location, stage, grade
 - Treatment (past, current, planned)

- Current symptoms
 - Chronicity
 - Severity
 - Present prior to cancer treatment?
 - Goals
- Screen for other concerns
 - Lymphedema
 - Neuropathy, balance
 - Cognition
 - Mental health



Physical Examination

Posture

Range of Motion

Flexibility

Strength

Sensation

Cardiovascular

Tissue health

Edema, lymphedema



Image: A physical therapist assesses the leg of a patient sitting at the edge of a table



Sexual Dysfunction Management

Multidisciplinary team

Education

Medications

Rehab

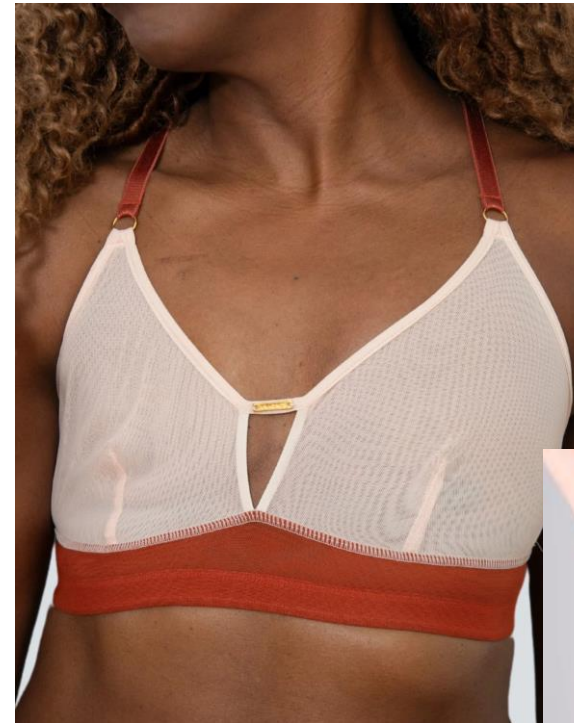


Image: A medical provider talking with a patient



Address sensation and body image

- Desensitization (Harden 2001)
- Vibration (Lupowitz 2022)
- Find clothes and lingerie that are comfortable and assists with positive body image



AnaOno



OstomySecrets



Manual Therapy

- Soft tissue mobilization
- Strain-Counterstrain
- Fibrosis techniques
- Scar mobilization

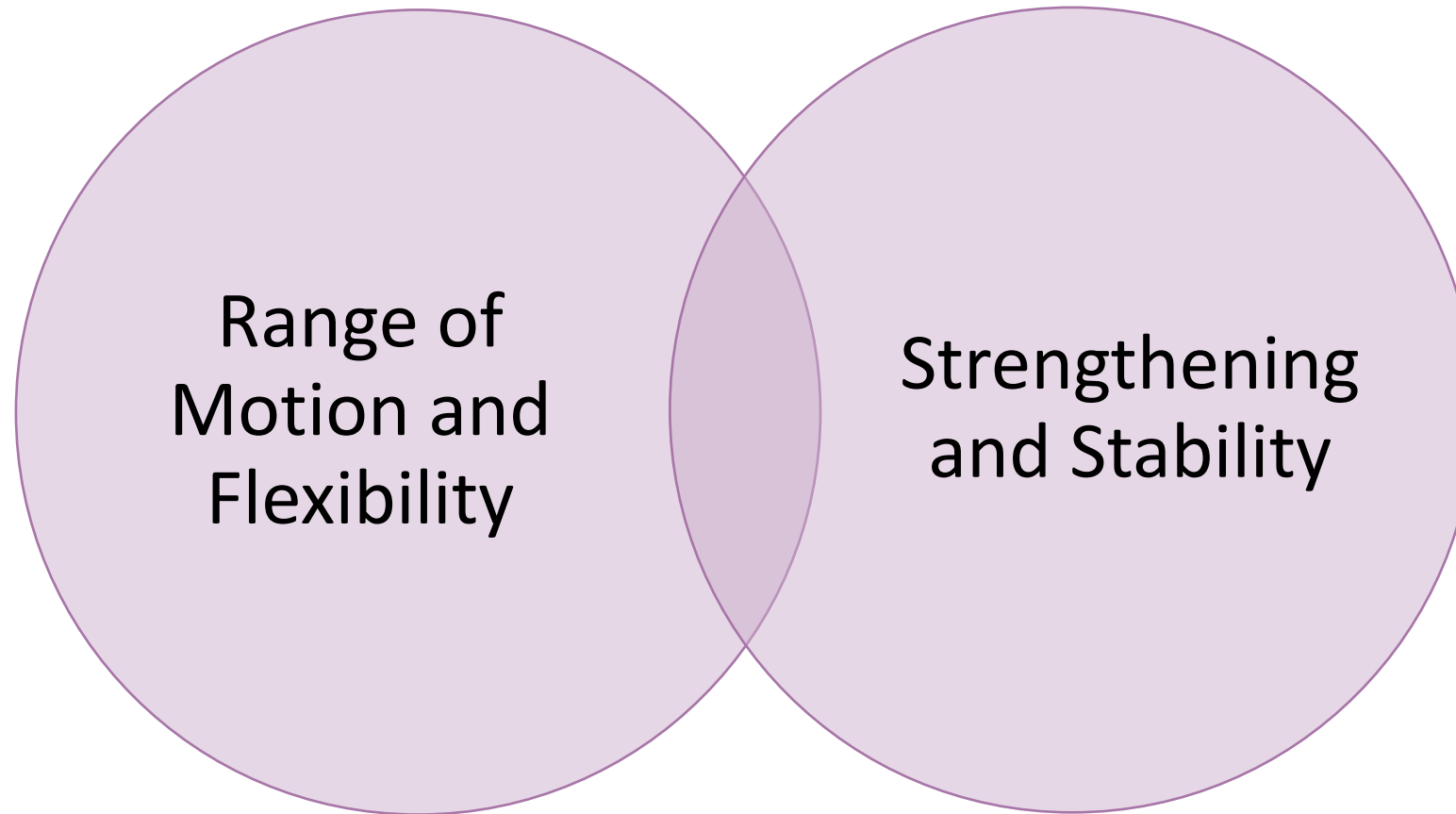


Image: Breast cancer survivor who had a double mastectomy, placing right hand on chest

Leung 2023, Pattanshetty 2022, Warpenburg 2021, Yao 2021



Therapeutic Exercise





Impact of Physical Activity on Sexual Health

- Decreases stress and anxiety
- Improves body image
- Reduces cancer related fatigue
- Increased clitoral vascularization
- Lower odds of Hypoactive Sexual Desire Disorder and Genital Arousal Disorder



Maseroli 2021



American College of Sports Medicine (ACSM) Exercise Recommendations

Aerobic: 150 minutes of moderate intensity, 75 minutes of vigorous intensity, or a combination of the two, per week

Resistance: Twice per week of moderate intensity for each the major muscle groups



Lymphedema Rehab

Refer to a Certified
Lymphedema
Therapist
(CLT or CLT-LANA)

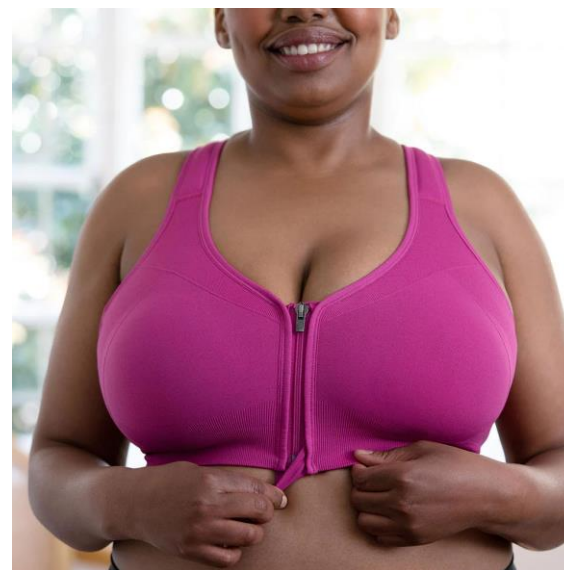


Image: showing different compression garments including a compression bra, compression shorts, and compression sleeve, to treat lymphedema

<https://www.lohmann-rauscher.com>

<https://www.juzo.com>

<https://www.lymphedivas.com>



References

- Babin E, Heutte N, Humbert M, Laccourreye O. Sex-related quality of life after total laryngectomy for cancer. *Eur Ann Otorhinolaryngol Head Neck Dis*. 2023 May;140(3):121-126. doi: 10.1016/j.anorl.2023.04.001. Epub 2023 May 2. PMID: 37142505.
- Blumer J. Arthralgia of menopause - A retrospective review. *Post Reprod Health*. 2023 Jun;29(2):95-97. doi: 10.1177/20533691231172565. Epub 2023 May 1. PMID: 37127408.
- Boswell EN, Dizon DS. Breast cancer and sexual function. *Transl Androl Urol*. 2015 Apr;4(2):160-8. doi: 10.3978/j.issn.2223-4683.2014.12.04. PMID: 26816822; PMCID: PMC4708123.
- Casswell G, Gough K, Drosdowsky A, Bressel M, Coleman A, et al. Sexual Health and Interpersonal Relationships After Chemoradiation Therapy for Human Papillomavirus-Associated Oropharyngeal Cancer: A Cross-sectional Study. *Int J Radiat Oncol Biol Phys*. 2021 Jun 1;110(2):382-393. doi: 10.1016/j.ijrobp.2020.11.005. Epub 2020 Nov 7. PMID: 33171200.
- Covrig VI, Lazăr DE, Costan VV, Postolică R, Ioan BG. The Psychosocial Role of Body Image in the Quality of Life of Head and Neck Cancer Patients. What Does the Future Hold?-A Review of the Literature. *Medicina (Kaunas)*. 2021 Oct 9;57(10):1078. doi: 10.3390/medicina57101078.
- Damast S, Jeffery DD, Son CH, et al. Literature Review of Vaginal Stenosis and Dilator Use in Radiation Oncology. *Pract Radiat Oncol*. 2019;9(6):479-491. doi:10.1016/j.prro.2019.07.001
- DeSantis CE, Lin CC, Mariotto AB, et al. Cancer treatment and survivorship statistics. *CA: A Cancer Journal for Clinicians*. 2014;64(4):252-271
- Esmat Hosseini S, Ilkhani M, Rohani C, Nikbakht Nasrabadi A, Ghanei Gheshlagh R, Moini A. Prevalence of sexual dysfunction in women with cancer: A systematic review and meta-analysis. *Int J Reprod Biomed*. 2022 Feb 18;20(1):1-12. doi: 10.18502/ijrm.v20i1.10403. PMID: 35308323; PMCID: PMC8902793.
- Florez N, Kiel L, Meza K, Wei Z, Mazzola E, Velazquez AI, Franco I, Fidler MJ, Elkins I, Feldman J, Seaborne L, Heisler C, King JC, Moore A, Wiens J, Kushner D. Sexual Health Assessment in Women with Lung Cancer study: Sexual health assessment in women with lung cancer. *Cancer*. 2023 Oct 16. doi: 10.1002/cncr.35057.
- Harden RN. Complex regional pain syndrome. *Br J Anaesth*. 2001 Jul;87(1):99-106. doi: 10.1093/bja/87.1.99. PMID: 11460817.
- Hoyle E, Kilbreath S, Dylke E. Body image and sexuality concerns in women with breast cancer-related lymphedema: a cross-sectional study. *Supportive Care in Cancer*. 2022 May;30(5):3917-24.
- Leung AKP, Ouyang H, Pang MYC. Effects of mechanical stimulation on mastectomy scars within 2 months of surgery: A single-center, single-blinded, randomized controlled trial. *Ann Phys Rehabil Med*. 2023 Jun;66(5):101724. doi: 10.1016/j.rehab.2022.101724. Epub 2023 Jan 14. PMID: 36645966.
- Lupowitz L. Vibration Therapy - A Clinical Commentary. *Int J Sports Phys Ther*. 2022 Aug 1;17(6):984-987. doi: 10.26603/001c.36964. PMID: 36237646; PMCID: PMC9528696.



References

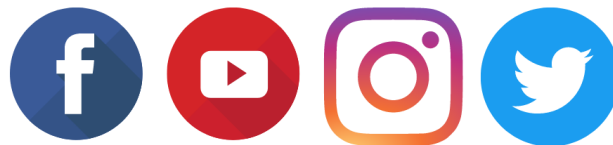
- Maseroli E, Rastrelli G, Di Stasi V, Cipriani S, Scavello I, et al. Physical Activity and Female Sexual Dysfunction: A Lot Helps, But Not Too Much. *J Sex Med*. 2021 Jul;18(7):1217-1229. doi: 10.1016/j.jsxm.2021.04.004.
- Pattanshetty RB, Patil SN. Role of Manual Therapy for Neck Pain and Quality of Life in Head and Neck Cancer Survivors: A Systematic Review. *Indian J Palliat Care*. 2022 Jan-Mar;28(1):99-112. doi: 10.25259/IJPC_10_2021. Epub 2021 Dec 18. PMID: 35673382; PMCID: PMC9165467.
- Radina ME, Fu MR, Horstman L, Kang Y. Breast cancer-related lymphedema and sexual experiences: a mixed-method comparison study. *Psychooncology*. 2015 Dec;24(12):1655-62. doi: 10.1002/pon.3778. Epub 2015 Mar 16. PMID: 25777358.
- Reimer N, Brodesser D, Ratiu D, Zubac D, Lehmann HC, Baumann FT. Initial observations on sexual dysfunction as a symptom of chemotherapy-induced peripheral neuropathy. *Ger Med Sci*. 2023 Jun 23;21:Doc08. doi: 10.3205/000322. PMID: 37426888; PMCID: PMC10326524.
- Rhoten BA, Davis AJ, Baraff BN, Holler KH, Dietrich MS. Priorities and Preferences of Patients With Head and Neck Cancer for Discussing and Receiving Information About Sexuality and Perception of Self-Report Measures. *J Sex Med*. 2020 Aug;17(8):1529-1537. doi: 10.1016/j.jsxm.2020.04.001
- Schutte LE, Melissant HC, Jansen F, Lissenberg-Witte BI, Leemans CR, Sprangers MA, Vergeer MR, Verdonck-de Leeuw IM, Laan ET. Effect of stepped care on sexual interest and enjoyment in distressed patients with head and neck cancer: a randomized controlled trial. *Sexual medicine*. 2021 Feb;9(1):100304-.
- Sertoz OO, Mete HE, Noyan A, Alper M, Kapka A M. [Effects of surgery type on body image, sexuality, self-esteem, and marital adjustment in breast cancer: A controlled study] *Turk Psikiyatri Derg*. 2004;15:264–275.
- Stein A, Sauder SK, Reale J. The Role of Physical Therapy in Sexual Health in Men and Women: Evaluation and Treatment. *Sex Med Rev*. 2019;7(1):46-56. doi:10.1016/j.sxmr.2018.09.003
- Warpenburg MJ. Deep Friction Massage in Treatment of Radiation-induced Fibrosis: Rehabilitative Care for Breast Cancer Survivors. *Integr Med (Encinitas)*. 2014 Oct;13(5):32-6. PMID: 26770116; PMCID: PMC4684108.
- Westermann M, Wolford J, Krychman M. Sexual function and the cancer patient: clinical considerations in the geriatric survivor. *Topics in Geriatric Rehabilitation*. 2016;32(3):210-217
- Winch CJ, Sherman KA, Koelmeyer LA, Smith KM, Mackie H, Boyages J. Sexual concerns of women diagnosed with breast cancer-related lymphedema. *Support Care Cancer*. 2015 Dec;23(12):3481-91. doi: 10.1007/s00520-015-2709-6. Epub 2015 Mar 27. PMID: 25814444.
- Yao C, Cheng Y, Zhu Q, Lv Z, Kong L, Fang M. Clinical Evidence for the Effects of Manual Therapy on Cancer Pain: A Systematic Review and Meta-Analysis. *Evid Based Complement Alternat Med*. 2021 Feb 5;2021:6678184. doi: 10.1155/2021/6678184. PMID: 33628310; PMCID: PMC7881934.



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