Connection, *EMBODIED*:

Body Image and Intimacy Changes During and After Cancer Treatment

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Objectives

- Understand how impaired body image, intimacy issues, and sexual dysfunction are side effects of cancer diagnosis and treatment
- Define Body Image and Body Dysmorphia
- Describe the most common symptoms associated with sexual dysfunction during and after cancer treatment
- Learn to manage the short- and long-term effects that impact sexual health
- Grow in our connection to ourselves and our partners

Body Image

- Body Image = The mental representation an individual creates of themselves, but it may or may not bear any relation to how one actually appears.
- A combination of thoughts and feelings you have about your body. May be positive and negative at different times or both at the same time.
- Personal Exercise:
- Think of 3 things you like about your body and 3 things you don't like.
- Now think about them all, are they mental representations (based on culture, society, social media, others' comments, childhood trauma, etc.) or are they actually how you appear (FACTS)?
- If some are actually related to how you appear are they A) Something that you believe is good or bad? B) How do you know that they are good/bad? C) Do you want to, or can you even, change them?

Body Dysmorphia

- A disabling preoccupation with perceived defects or flaws in appearance. It affects all genders and can make sufferers excessively self-conscious.
- People with body dysmorphia often drastically change behavior and thoughts over a fear or their perceived flaws.
  - Covering up perceived defects (heavy makeup over a scar/birthmark)
  - Self-conscious in social situations
  - Avoidance behavior- avoid work gatherings, school, dating, family outings, beaches/pools
  - Pursuit of obsessive cosmetic treatments
  - Agoraphobia- Fear of leaving home
  - Eating Disorders can develop or excessive dieting

Cancer Survivors and Body Image

Any cancer treatment can lead to disordered body image:

- Body alterations- mastectomy, alopecia (hair loss), surgical ostomy, glossectomy, neck dissection, lymphedema, skin discoloration, incontinence, loss of mobility, scarring
- Pain
- Fatigue and poor quality sleep
- Hormone changes- AI/tamoxifen therapy, ADT, TAH/BSO
- Depression or Anxiety
- Weight loss or weight gain
- Sexual functioning

Intervention for Body Image Issues

- CBT = Cognitive-Behavioral Therapy
- Psychosexual therapy
- Expressive-supportive therapy
- Education interventions
- Physical fitness Intervention
- Sensate-focused Intervention

Sexual Health

Sexual HEALTH

- A state of physical, emotional, mental and social well-being in relation to sexuality
- Sexuality is a natural part of life and involves more than sexual behavior
- Respecting sexual rights
- Access to sexual health information and education
- Ability to communicate about sexual health with partners and providers

Sexual DYSFUNTION

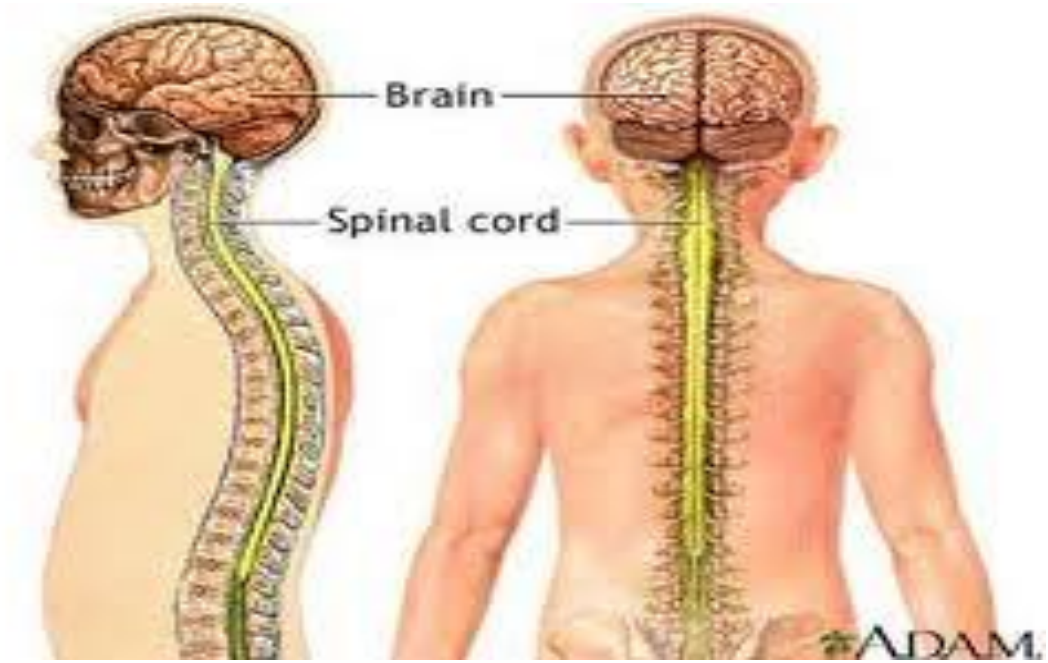
- 4 categories: Disorders of sexual desire/interest, arousal, orgasm, and sexual pain
- Any problem that prevents a person from experiencing satisfaction from sexual activity (again, subjective and individualized)
- Examples: asexuality, anorgasma, ED, delayed ejaculation, vaginal atrophy, decreased libido, dyspareunia (pain)

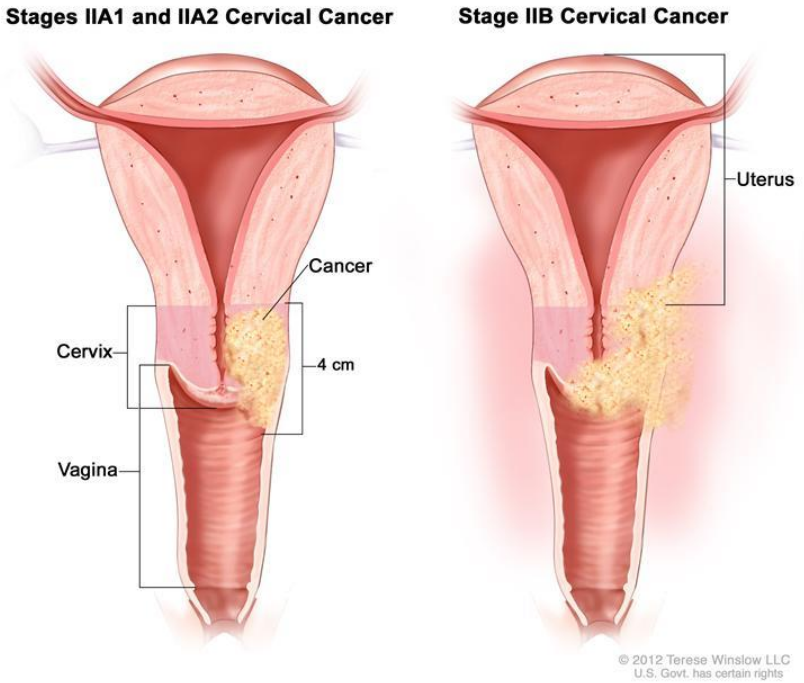
Contributors to Sexual Dysfunction

Cancer Survivors:	Disease Itself	Surgery	Chemotherapy	Radiation
Hormone Therapy	Supportive Medications	Transplant-GVHD	Menopause	Fatigue, pain, medication s/e, depression

Disease Itself: Cancer

- Depending on where the tumor is, sexual function can be compromised





Surgery

Dysfunction depends on the type of surgery performed:

- Mastectomy: decreased interest in sex, distorted body image
- Rectal Surgery: Injury to autonomic nerves in pelvis
- Prostatectomy: Radical, damages nerves that direct blood flow into the penis
- TAH and/or BSO: Orgasmic problems, dyspareunia, lack of sexual interest, decreased lubrication
- Vulvectomy: causes morbidity, vaginal tissue sparing surgeries help but are not predictors of sexual function
- Abdominoperineal Resection: Dyspareunia, pelvic adhesions and scarring

Chemotherapy

- Associated with loss of desire due to N/V, diarrhea, constipation, mucositis, weight changes, fatigue
- Cytotoxic agents associated with vaginal dryness, dyspareunia, reduced ability to reach orgasm
- Can cause premature ovarian failure- vaginal atrophy, thinning of vaginal tissue, loss of elasticity, decreased lubrication
- Neurotoxic chemotherapies have been associated with decreased ejaculation of semen

Radiation

- Can produce its own physical s/e: fatigue, N/V, diarrhea, etc.
- Prostate: damages arterial system transporting blood to penis, estimated 15-33% of men recover fully functional erections s/p external beam
- Pelvic: both external and implanted shown to damage the vaginal epithelium and basal layer of the mucosa → vaginal stenosis and vascular fibrosis
- Longitudinal prospective study s/p cervical radiation, 85% reported low or no sexual interest, 35% reported mod-severe lack of lubrication, 30% dissatisfied with sexual life

Hormone Therapy

- Androgen therapy: Androgens act in the brain to promote sexual desire, reduced circulating androgens lead to decreased sexual interest and erectile dysfunction
- Tamoxifen: Associated with vaginal dryness/itching, soreness, occasional decrease in sexual desire and orgasmic delay
- Tamoxifen: Can increase rate of VMS by about 10%
- Aromatase Inhibitors: Strongly associated with vaginal dryness/itching, decreased sex drive

Stem Cell Transplant

- GVHD- especially chronic can lead to loss of desire, ED associated with autonomic neuropathy
- Allo HSCTs have been implicated in causing genital GVHD, HPV reactivation, ovarian failure, infertility, sexual dysfunction

“Vaginal Dryness”

- AKA: Vaginal atrophy, Genitourinary Syndrome of Menopause
- Drop in estrogen hormone (drastic, sudden) = less lubrication and less stretchable vagina. May become shorter and tighter at opening
- Causes for sudden estrogen drop for cancer survivors
  - GYN surgeries- oophorectomy
  - Aromatase Inhibitor or Tamoxifen use (5-10 years duration)
  - Radiation therapy that damages ovaries
  - Hypothalamic amenorrhea (excessive stress, not getting enough nourishment)
  - Chemotherapy- Anthracycline (daunorubicin, doxorubicin), cyclophosphamide, paclitaxel, platinum regimens (cisplatin, carboplatin, oxaliplatin)
  - Ovarian Suppression: drugs (leuprolide or goserelin)

Treating Vaginal Dryness

- Vaginal moisturizers for longer-term relief from dryness
  - Replens, Good Clean Love BioNourish, Revaree, Hyalo Gyn
  - Vitamin E or Coconut oil (do not use petroleum jelly/Vaseline)
  - Use 3-5 times per week, disposable applicator, suppository, or directly on vulva
- Regular sexual activity or stimulation promotes vaginal health and blood flow
- Vaginal/vulva lubricants for temporary relief of dryness immediately before and during sexual intercourse
  - Good Clean Love, Aliquid, Astroglid, K-Y Jelly, Ah! Yes
  - Steer clear of any scented, colorful, warming/cooling products or those containing parabens
- Low dose vaginal estrogen therapy in cream or vaginal tablet form

Erectile Dysfunction

- Surgery: disrupts the nerves close to the prostate that control blood flow to the penis. Can still occur with "nerve-sparing surgeries" but at lesser rate
- Radiation: prostate, bladder, colon and rectal cancers in particular
- Hormone therapy: ADT causes ED and loss of sexual desire
- Chemotherapy: Cisplatin, vincristine, paclitaxel, bortezomib, thalidomide can damage nerves
- Stem call transplant: Often high doses of chemotherapy used. GVHD, loss of testosterone.

Treating ED

Drugs

Pills

-Avanafil, sildenafil, tadalafil, vardenafil

Injections

-Alprostadil; Very thin needle puts drug into the side of the shaft a few min prior to sexual activity

Pellets

-Medicated urethral system for erection (MUSE)

-Placed into the urethra after urinating then massage penis to absorb drug

Devices/implants

Vacuum Erection Devices (VED)

-Suction draws blood into penis

-Stretchy band placed at the base to maintain

-Prosthesis

-2 or 3 piece inflatable cylinder implant

-Semi-rigid/non-inflatable implant

Counseling

-Ideally with a certified sex therapist or alternatively with a psychologist, counselor or psychiatric NP.

-Relationship counseling for education and relationship stress

-If ED is exacerbated by stress, anxiety or depression

Hot Flashes

- AKA: Vasomotor symptoms, hot flushes; night sweats
- Likely caused by change in the hypothalamus- the part of the brain that regulates temperature.
- Cancer related causes include:
  - Drugs: Tamoxifen, raloxifene, some antidepressants, steroids, opioids
  - Oophorectomy surgery
  - Surgical removal of testes
  - Chemotherapy
  - Radiation therapy
  - Gonadotropin-releasing hormone therapy or estrogen therapy

Treating Hot Flashes

- Estrogen is still the gold standard treatment for hot flashes. BUT, systemic estrogen not recommended for those who have had estrogen positive cancer
- Lifestyle changes: wearing layers, avoiding triggers (spicy food, alcohol, caffeine), relaxation exercises, cooling room temp and sleeping temp
- Herbal supplements: tofu/soy, black cohosh (research is mixed; inform provider)
- Paroxetine- SSRI antidepressant
- Bazedocifene is a SERM Selective Estrogen Receptor Modulator used for osteoporosis combined with conjugated estrogens though can be used for VMS.
- Fezolinetant (2023) tablets are non-hormone, FDA approved to target neurons in the hypothalamus to reduce heat signals that trigger VMS. In the randomized control trial research study fezolinetant did not show any clear trends in altering sex hormones

NON-HORMONAL PHARMACOLOGIC TREATMENTS AND DOSING[a]

Class	Drug	Commonly Used Daily Dose for Managment of Vasomotor Symptoms	Comments (For maximum benefit, may increase to higher doses after a week as tolerated)
Antidepressants[b]	Venlafaxine[c] (SNRI) (preferred)	75 mg	Start at lowest dose possible (25 mg or 37.5 mg) and increase as tolerated
	Desvenlafaxine (SNRI)	100 mg	Start at lowest dose possible (25 mg or 50 mg) and increase as tolerated
	Escitalopram (SSRI)	20 mg	• Start at lowest dose possible (10 mg) and increase as tolerated
	Citalopram (SSRI)	20 mg	• Start at lowest dose possible (10 mg) and increase as tolerated
	Sertraline (SSRI)[d]	50 mg	• Start at lowest dose possible (25 mg) and increase as tolerated • Limited data on effectiveness • Use with caution for survivors on tamoxifen
	Paroxetine (SSRI)[d]	Low-dose 7.5 mg or Standard paroxetine short acting up to 20 mg, controlled release up to 25 mg	• Low-dose (7.5 mg) paroxetine is the only FDA-approved alternative to hormones for hot flashes • Use with caution for survivors on tamoxifen
	Fluoxetine (SSRI)[d]	20 mg	• Start at lowest dose possible (10 mg) and increase as tolerated • Limited data on effectiveness • Use with caution for survivors on tamoxifen
Anti-convulsant	Gabapentin[c] (preferred)	900 mg (typically 300 mg 3 times a day)	• Start at lowest dose possible (100 mg or 300 mg) and increase as tolerated • Consider starting at night time as this drug tends to cause sedation
	Pregabalin	150–300 mg	Start at lowest dose possible (25 mg) and increase as tolerated
Alpha-agonist hypertensive	Clonidine	0.1 mg (oral or transdermal)	Transdermal preparations may have fewer side effects

[a]For long-term care or maintenance and/or if lack of response, consider referral to appropriate health care specialist. A gradual tapering of dose rather than an abrupt discontinuation of drug is recommended when discontinuing these treatments.

[b]Anticipated clinical response of SSRIs/SNRIs for menopausal symptoms tends to be more rapid than the typical response for depression.

[c]Venlafaxine and gabapentin have been studied for the treatment of menopause symptoms in males, but data are limited. The other therapies have been used but not tested in males.

[d]SSRIs and in particular paroxetine block conversion of tamoxifen to active metabolites through CYP2D6.

Body Image and Intimacy

- Most important = **EDUCATION.** Educate yourself about how your anatomy, how your body functions post treatment. Educate your partner and even family and friends if you desire.
- Create goals, be realistic about timing
- Communicate with your healthcare team and counselors
- Be open to resources available
- Be kind to yourself and gracious about your experience

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