Sexual Health & Survivorship: Effects of Breast Cancer on the Pelvic Floor

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Disclosures:

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

Background

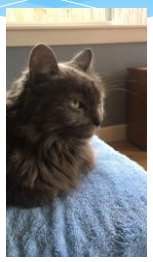
* Bachelor of Science in Bio-Psychology from UCLA
* Doctor of Physical Therapy (DPT) degree from University of Southern California
* Taught at Santa Monica Community College and California State University at Northridge
* Physical Therapist for Providence Health Services
* Clinical Specialties: Oncology, Lymphedema, Pelvic Health
* Regional Leader for Providence Clinical Advancement Program: Oncology & Lymphedema

Providence St. Joseph Health

Landlords

← Looking at a treat

Looking at the dogs →



Objectives:

- Identify possible side effects of breast cancer treatments as they relate to the pelvic floor.
- Discuss options available for addressing these sides effects, including changing bowel / bladder habits, pelvic floor relaxation training, vaginal moisturizers, topical vaginal estrogen, lubricant recommendations, and more.
- Describe the effects and most current evidence regarding the use of topical vaginal estrogen.
- Provide an open forum for questions and discussion about breast cancer and sexual health.

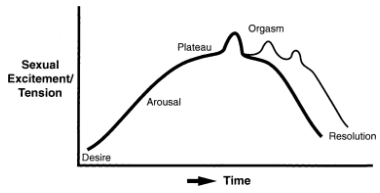
Non-Objectives

- To relay the idea that penetrative vaginal intercourse should always be a goal
- To relay the idea that sex is only for survivors
- To put forth the idea that there is a timeline for returning to sexual intercourse
  - While the incidence of sexual symptoms during and after breast cancer treatments is high, not everything has to be treated, or treated immediately

Why is this subject important? (Why am I here? Why are you here?)

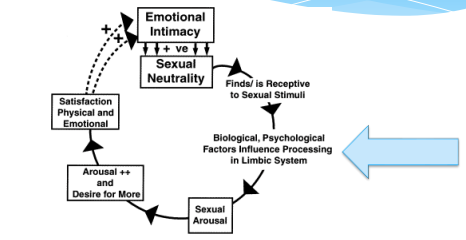
- Anticipated 20.6 million survivors by 2026 (ACS Survivorship Facts and Figures 2016)
- >60% experience 1 or more functional impairments
- Rehabilitation referral rates are as low as 2% (Cheville 2017)
- Physical problems are outpacing emotional problems (Weaver et al 2012)
- Functional impairments are drivers of distress and anxiety
- Functional screenings, assessment and intervention are essentially absent in cancer care (Stout 2018)

Traditional Human Sex Response Model



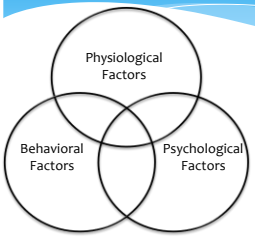
Traditional human sex response cycle of Masters, Johnson and Kaplan. Reprinted with permission from the American College of Obstetricians and Gynecologists (Obstetrics and Gynecology, 2001, Vol. 98, pp. 350–353).

Basson Model of Sexual Motivation



Basson R. The female sexual response: a different model. J Sex Marital Ther 2000;26: 51–65.

OHSU Vulvar Clinic Chart



* The treatment of pain with sex must be multifaceted and include a team of specialists including, but not limited to, oncologists, partners, Integrative Medicine practitioners, behavioral health therapists, physical therapists, primary care physicians, couples counselors etc.

Male versus Female Comparison

To Medical Providers:

Possible Verbiage

- "Many of the people that I talk to have changes to their sex lives throughout this process… is that something that you are dealing with and would like to address?"
- "I know this may seem unrelated to your cancer diagnosis, but it's common for people to have changes to their bladder and bowel function. Have you noticed this?"
  - Less than 50% of women affected by urinary incontinence (UI) and 30% of women affected by fecal incontinence (FI) seek care. (Brown, 2016)

Brown, H.W., Rogers, R.G. & Wise, M.E. Int Urogynecol J (2017) 28: 543.

To Medical Providers: Be Trauma - Informed

Trauma-Informed Care Throughout the Breast Cancer Journey

- Medically necessary, well-intended, and seemingly sterile clinical procedures potentially serve as emotional triggers or reminders of abuse (Schnur 2011)
  - Darkness (Radiotherapy, Radiology)
  - Exposure of sexual organs (breast, gynecological, anal)
  - Being silenced, immobilized, or powerless (patients are often told not to move or speak during procedures)
  - Infliction of pain
  - Penetration (by needles, hands, fingers, surgery)

Schnur, JB., Goldsmith, RE. Journal of Clinical Psychology (2011) 29: 4054-4056.

ASK

- Such information is rarely volunteered (currently <1/3 of clinicians usually screen for trauma, Weinreb 2010)
- Although medical professionals may be trying to be sensitive and may worry about opening old wounds, published stories indicate that most patients with abuse histories who have not voluntarily disclosed to health professionals would like to be asked about abuse (McGregor, et al 2010)

Weinwreb L, Savageau JA, Candib LM, et al: Screening for childhood trauma in adult primary care patients: A cross-sectional survey. *Prim Care Companion J Clin Psychiatry* 12:e1-e10, 2010
McGregor K, et al. Health Professionals' responses to disclosure of child sexual abuse history. *J. Child Sex Abuse* 19:239-254, 2010.

To Medical Providers: Care for the Transgender & Gender Diverse Persons

- 24% of transgender persons report unequal treatment in health care environments
- 19% report they were refused care altogether
- 33% do not seek preventative services
- How can we help?
  - Establish a safe and welcoming environment
  - "Although I have limited experience caring for gender-diverse persons, it is important to me that you feel safe in my practice, and I will work hard to give you the best care possible."
  - Gender neutral intake forms

Klein, et al. Caring for Transgender and Gender-Diverse Persons: What Clinicians Should Know. *Amer Family Physician*. 98:11:645-653, 2018

The Heterosexual Assumption

- Even clinicians who have a special interest in sexual medicine may be hesitant to broach the subject
  - Only 50% routinely ask patients directly (Saheb 2018)
  - Over 40% of those who do not ask said that sexual orientation is irrelevant to patient's care. (Saheb 2018)
- ASK
  - Patient's may feel uncomfortable correcting the medical professional (Reese, 2018)

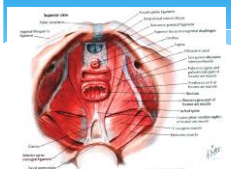
Saheb, et al. Sexual Health Practitioners' evaluation of mend who have sex with men." *J Sex Med.* 2018; 15:942-946.
Reese, Shelly. Should Doctors Ask About Their Sexual Orientation? *Medscape.* 2018

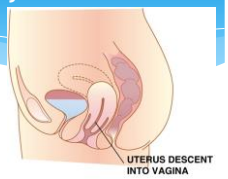
To Patients, Survivors, Forever Fighters, and Support Persons

KEEP CALM AND SPEAK UP

The Pelvic Floor

Anatomy





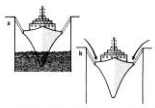


Figure 28.4 a The uterus and vagina (the boat) anchored in place by the pelvic ligaments and endopelvic fascia (the mooring), supported by the pelvic musculature (the water). b Defects in or weakening of the pelvic floor musculature may strain the ligaments beyond their capacity to support the uterus and vagina. (From Norton PA (1999) *Pelvic Floor Disorders: The Role of Fascia and Ligaments*. Philadelphia, p 927.)

Pelvic Floor Functions

- Pelvic floor muscles (PFM) are integral for:
  - **Continence**
  - **Support**
  - **Stability of the pelvic girdle**
  - **Stability of the spine**

Pelvic Floor Function

- Female Pelvic Floor Video
- Male Pelvic Floor Video

Pelvic Floor Disorders

Pelvic floor disorders (PFD) are **multifactorial**

- Symptoms include:
  - Urinary incontinence
  - Fecal incontinence
  - Pelvic organ prolapse
  - Pelvic pain syndromes
  - Constipation
- Dysfunction occurs when the pelvic floor muscles are unable to function correctly

It is about more than Kegals!

Always one for keeping fit, Jill did her regular pelvic floor exercises.

Breast Cancer Treatment & Their Effects on the Pelvic Floor

- Surgery
- Chemotherapy
- Radiation
- Hormonal Therapies

How does surgery on the breast affect the pelvic floor?

- Constipation can be related to pain medications, decrease in activity, diet
- Decreased function of one or both arms, either temporary or long term can decrease overall activity, affects the ability to get into positions for sex
- Risk reducing surgical removal of the uterus and / or ovaries throws the body into a menopausal state causing vaginal dryness

Effects of chemotherapy on the pelvic floor:

- Diarrhea
- Fatigue (the pelvic floor is a group of skeletal muscles)
- Vaginal dryness
  - Chemotherapy attacks rapidly dividing cells, including the cells in the lining of the vagina
  - Losing hair "not just on the head"

How does radiation therapy on the chest wall affect the pelvic floor?

- Decrease function in one or both arms can make it difficult to get into postures that are ideal for the functions of the pelvic floor (voiding, defecation, intercourse)
- Fatigue

Hormonal Therapies and their potential effects on the pelvic floor:

- Weight gain – increases the potential for urinary incontinence and pelvic prolapse, decreased activity
- Fatigue
- Constipation
- Vaginal dryness
- Loss of libido
- Vaginal discharge / bleeding

Now after that we may feel…

But hopefully we can end up like this!

Bowel / Bladder Habits

- Water soluble fiber
  - NOT Miralax
  - Examples: Heather's Tummy, Metamucil, Citrucil, Benefiber
  - Powder is more effective than pills, or gummies
- Not as important how often we go:
  - What does the stool look like
  - Painless, NO STRAINING

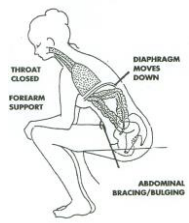
Bowel / Bladder Habits

- Water Soluble Fiber:
  - 1 scoop in evening around dinner
- Drink a warm beverage when you wake
- Exercise
- Train your body to have a bowel movement after meals
- Avoid bearing down / straining
- Drink plenty of water
- Proper Potty Posture

Bowel / Bladder Habits

- Do not hover!

Proper Potty Posture

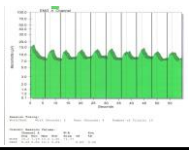


Pelvic Pain

- High Tone Pelvic Dysfunction
- The pelvic floor needs to be able to do BOTH contracting and relaxing
- Exercise: Pelvic Floor As An Elevator

Pelvic Floor Relaxation Training

- Biofeedback (in clinic)
- Vaginal dilators (at home)
- Internal manual techniques (either in clinic by therapist, at home with partner or self)



Pelvic Floor Relaxation Training

- Other medical treatments:
  - Botox injections
  - Vaginal Valium
- Muscles AND the tissues have to be addressed:

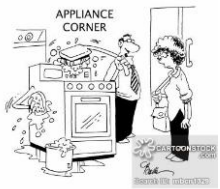
Return to Activities of Daily Living

- Addressing constipation
- Addressing pelvic prolapse
- Addressing urinary incontinence
- Addressing fecal incontinence

- These also affect return to exercise, return to work, return to family life

Vaginal Health 101

- No over-cleaning – avoid using soaps, avoid using washcloths and loofahs, avoid scrubbing
- Using water and a clean hand, gently flush front to back
- Always wipe front to back
- Avoid shaving or waxing inside the labial folds
- No thongs



"Of course, the self-cleaning models tend to cost a little more."

Lubricants

- For during intercourse only
- To decrease friction and decrease pain
- Look at the ingredients
- Ask your PCP, oncologist for recommendations
- Examples: Yes Lube, Slippery Stuff, coconut oil

Vaginal Moisturizers

- Apply at night and wear a pad when you sleep, keep on overnight then gently wash with water in the morning
- 4-5x/week
- 1 hour prior to intercourse
- Not a lubricant
- Moisturizer → vaginal health
- Lubricant → intercourse

Vaginal Moisturizers

- Always look at the ingredients
- Ask your PCP, oncologist, physical therapist for recommendations
- The less ingredients, the better
- Examples: Yes VM, Hyalo Gyn
- This is a NON hormonal option for patient

Vaginal Moisturizers: The Evidence.

- Limited research shows no long term vaginal changes, only temporary / "transient" benefit (Biglia, 2010)
- Non-hormonal intra vaginal moisturizer is a safe and efficient therapeutic option for the improvement of vaginal dryness for postmenopausal women (Vale, 2019)

Nicoletta Biglia, Elisa Peano, Paola Sgandurra, Giulia Moggio, Enrico Panuccio, Marco Migliardi, Nicoletta Ravarino, Riccardo Ponzone & Piero Sismondi (2010) Low-dose vaginal estrogens or vaginal moisturizer in breast cancer survivors with urogenital atrophy: a preliminary study, Gynecological Endocrinology, 26:6, 404-412.
Vale, Fabiene et al "Efficacy and safety of a non-hormonal intravaginal moisturizer for the treatment of vaginal dryness in postmenopausal women with sexual dysfunction. *Eur Jrnl Obs.* 234, 2019(92-95)

Vaginal Lidocaine

- To be applied by soaking a cotton ball in the lidocaine
- Place cotton ball at entrance to the vagina
- Leave for 10 minutes so the tissues become numb
- Proceed with vaginal intercourse or dilator program

- This is a prescription option for preparation for intercourse
- This is also non-hormonal

Vaginal Lidocaine: The Evidence.

- Breast cancer survivors with menopausal dyspareunia (pain with intercourse) can have comfortable intercourse after applying liquid lidocaine compresses to the vulvar vestibule before penetration (Goetsch 2015)
- In breast cancer survivors with dyspareunia, exquisite sensitivity was vestibular and reversible with aqueous lidocaine. Vaginal tenderness was rare despite severe atrophy (Goetsch, 2014)

Goetsch, M et al. A Practical Solution for Dyspareunia in Breast Cancer Survivors: A Randomized Controlled Trial. *J Clin Oncol.* 2015; 33(30): 3394-3400.
Goetsch, M et al. Locating pain in breast cancer survivors experiencing dyspareunia. A randomized control trial. *Obs and Gyn.* 2014; 123(6): 1231-1236

Vaginal Estrogen

- Very different than Hormone Replacement Therapy (HRT)
- Low dose, the effect is local
- Low risk for systemic absorption (evidence is later in presentation)
- Should be part of the conversation with health care providers

Process for vaginal estrogen:

- Bring up symptoms with oncologist
- Ask specifically about vaginal estrogen / topical hormone treatment
- This is a 2-way discussion between the patient and their oncologist.
- Vaginal estrogen / topical hormones are prescription only
- Can be expensive and may not be covered with insurance
- Consider "pharmacy shopping" especially with compounded or online pharmacies.

Application of vaginal estrogen:

- Do not use on the same nights as vaginal moisturizer
- Frequency of application can vary
- Usually every night for 2 weeks, then 2-3x/week
- Applied by applicator or with fingers
- Keep topical estrogen on overnight, then gently wash in the morning

Vaginal Hormones: Evidence & Discussion

- Aromatase inhibitors (AI) are associated with significant urogenital atrophy, affecting quality of life and drug compliance.
- Objective: To evaluate safety of intravaginal testosterone cream (IVT) or an estradiol-releasing vaginal ring in patient with early-stage breast cancer receiving an AI.
- Conclusion: Treatment with a vaginal ring or IVT over 12 weeks met the safety standards. Vaginal atrophy, sexual interest, and sexual dysfunction were improved.
- Melisko M, et al. Vaginal Testosterone Cream vs. Estradiol Vaginal Ring for Vaginal Dryness or Decreased Libido in Women Receiving Aromatase Inhibitors for Early-Stage Breast Cancer: An RCT. *JAMA Onc.* 2017;3(3):313-319.

Vaginal Hormones: Evidence & Discussion

- Hormone replacement therapies such as the intravaginal ring with a sustained-release estradiol-loaded core (Estring) have proven effective in improving patient compliance for symptomatic relief of atrophic vaginitis and in restoring normal vaginal pH and cytology without side effects of endometrial proliferation or a significant rise in systemic estradiol levels.
- Recommended alternatives are estradiol tablets (Vagifem) and low doses of cream (Premarin).
- Long term data is lacking
- Must look at each patient as individuals and other non-hormonal treatments must be considered.
- Derzko, C. Management of sexual dysfunction in postmenopausal breast cancer patients taking AI therapy. *Curr Onc.* 2007; 14(1) 20-40.

Vaginal Hormones: Evidence and Discussion

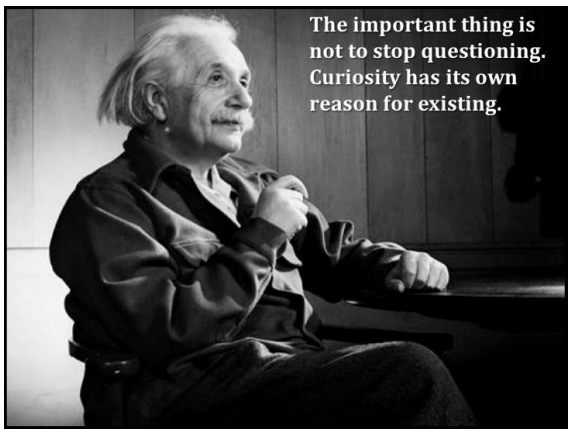
- Pain and vaginal dryness in women without a history of breast cancer can usually be safely treated with vaginal estrogens, in the form of a cream, pessary or ring, and simple lubricants or vaginal moisturizers. Safe usage of vaginal estrogen replacement therapy in breast cancer patients has not been studied within randomized clinical trials of long duration.
- Sassarini J et al. Managing vulvovaginal atrophy after breast cancer. *Post Reproductive Health.* 2018;24(4)163-165.

Vaginal Hormones: Evidence & Discussion

Sassarini J et al. Managing vulvovaginal atrophy after breast cancer. *Post Reproductive Health.* 2018;24(4)163-165.

Vaginal Hormones: Evidence and Discussion

- Objective: To determine the association between use of vaginal estrogen and risk of a global index event (GIE), defined as time to first occurrence of coronary heart disease (CHD), invasive breast cancer, stroke, pulmonary embolism, hip fracture, colorectal cancer, endometrial cancer, or death from any cause.
- Conclusion: The risks of cardiovascular disease and cancer were not elevated among postmenopausal women using vaginal estrogens, providing reassurance about the safety of treatment.
- Crandall, Carolyn J et al. Breast cancer, endometrial cancer, and cardiovascular events in participants who used vaginal estrogen in the Women's Health Initiative Observational Study. *Menopause.* 2018;25(1)11-20(10).



The Line of Communication…

As more women continue to survive diagnosis and treatment of breast cancer, sexual dysfunction disorders have become an evident challenge for patients among this population. Addressing sexual concerns is in turn becoming an apparent necessity in managing the care of patients with breast malignancies. Among the major challenges existing in clinical practice is the barrier to communication regarding such issues involving both the physician and patient. Identifying and developing treatment plans are essential in improving the quality of life in patients suffering from sexual dysfunction. (Boswell 2014)

Boswell, E et al. Breast Cancer and Sexual Function. *Transl Androl Urol.* 2015; 4(2): 160-166.

Online Resources

- Will2Love.com
- Lbbc.org (living beyond breast cancer)
- Young Survivor Coalition
- Sexual Medicine Society of North America
- www.menopause.org - Has a fantastic "sexual health" module
- www.youtube.com : Sexuality and Breast Cancer (John Hopkins University)

Case Study #1

- 59 year old female
- Underwent bilateral mastectomy with left sided LND 5 years ago followed by radiation to the left chest wall
- No reconstruction
- Underwent a complete hysterectomy with bladder reconstruction 2 years ago secondary to pelvic prolapse and incontinence
- Widowed
- Goal: No current partner, but is hopeful to meet someone in the future and "wants to be ready."
- Has dated both men and women in her past

Case Study #2

- 28 year old female
- metastatic breast cancer patient
- Palliative care
- Childless
- Goal: To continue to participate in sexual intercourse with husband

Case Study #3

- 55 year old female
- Underwent chemotherapy, surgery, and radiation ~1 year ago
- Is now on Tamoxifen, planning on staying on it for 10 years
- Married to a male
- Husband has undergone a prostatectomy recently, is no longer able to get an erection
- Goal: To maintain intimacy and achieve orgasm

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