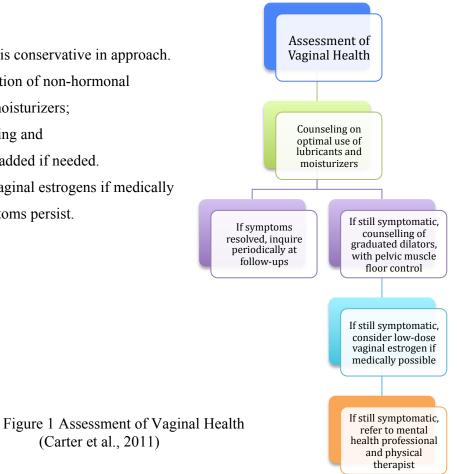
Vaginal Health Promotion Strategies

Women who have cancer treatments resulting in premature menopause (or hormonal deprivation), or who are aging, may experience vaginal changes. Vaginal atrophy may cause vaginal dryness, tightness/loss of elasticity, and pain connected with sexual caressing of the vulva, vaginal intercourse, or gynecologic examinations. Women may experience itching, burning, and increased frequency of vaginal and urinary tract infections. Restoring lubrication and a natural pH to the vagina and vulva is the key to preventing or alleviating these problems. Simple strategies can help to improve vaginal moisture and elasticity (Carter, Goldfrank, & Schover, 2011).

Figure 1 shows a treatment algorithm outlined by Carter et al. (2011). The oncology team and/or a treating gynecologist can use the algorithm to identify and address vaginal health issues in women treated for cancer. Carter et al. believe these strategies should be suggested to all female cancer survivors.

(Carter et al., 2011)

The treatment algorithm is conservative in approach. It begins with a combination of non-hormonal vaginal lubricants plus moisturizers; pelvic floor muscle training and vaginal dilators are then added if needed. Treatment advances to vaginal estrogens if medically recommended and symptoms persist.



Vaginal Moisturizers and Lubricants

Many women, and healthcare professionals, do not distinguish between vaginal lubricants and vaginal moisturizers. However, there are important differences in their formulas and instructions for use. The following table adapted from Carter et al. (2011) outlines some of the key uses and differences.

Vaginal Moisturizers

Available in gels, tablets, or liquid bead

- Administered either in a tampon-shaped applicator or as a vaginal suppository
- Used to hydrate the vaginal tissues and improve vaginal pH
- Decreases vaginal dryness and increases vaginal comfort
- Non-hormonal, over-the-counter products that need to be used several times a week regularly; improvements may not be evident for 4-6 weeks.
- Last for up to 2 to 3 days; then must be reapplied
- Best absorption occurs when used prior to bedtime
- Types include: polycarbophil-based gel (Replens), vaginal bead suppositories and/or vaginal Vitamin E (capsule needs to be punctured prior to insertion)
- Benefit may derive from regular use versus specific type

Vaginal Lubricants

- Available in liquid or gel form
- Applied in vagina and around genitals prior to sexual activity. May need to be reapplied during sexual activity. Important to also apply to a male partner's genital area especially before penetration
- Used to minimize dryness and pain during sexual activity and gynecologic exams
- Water and silicone based recommended. Water-based wash away more easily, less expensive & nonstaining.
- Avoid petroleum-based; they do not wash away easily and can increase risk of infection
- Use caution with perfumed, flavored or heating lubricants; they may irritate or be atrophic to delicate tissues
- Common brand names or types can be found in drugstore chains, but online web sites and sex boutiques may offer greater variety
- Saliva is a natural lubricant

Pelvic Floor Muscle Control

Pelvic floor muscle awareness and control is an important component of vaginal health promotion. Relaxation of the pelvic floor muscles minimizes pain from vaginal atrophy during sexual activity or pelvic examinations. There may also be additional benefits of increased blood flow to the pelvic floor, clitoris, and genital area shown with possible rehabilitative effects and improved arousal response. It has also been suggested that women with greater pelvic floor muscle strength have better sexual functioning. Vibrator use and/or self-stimulation may potentially have equal or greater benefits by promoting oxygenated blood flow to the pelvic floor through sexual arousal.

Control of the muscles surrounding the vaginal introitus can be learned by identifying the sensation of muscle tension and focusing on the stop and start of urine flow. Many women can learn to tense and relax the muscles around the vaginal entrance through the practice of standard kegel exercises. If they have difficulty with this technique, a referral to a physical therapist that uses pelvic biofeedback to enhance pelvic floor muscular control may be recommended.

Vaginal Dilator Therapy

The use of vaginal dilators may be an effective way to increase women's vaginal comfort and pelvic floor muscle control. Vaginal dilators have typically been prescribed to stretch the tissues in the vagina and prevent atrophy after radiation therapy. However, they can also provide feedback to women as they learn to control tension and relaxation in the pelvic floor muscles and increase confidence that an object, including a speculum, may be inserted into the vagina without pain.

The mechanism by which dilator therapy actually has an impact on maintaining vaginal depth or caliber after radiation therapy remains unclear. It has been shown to prevent agglutination of the vaginal walls, fibrosis prevention, and/or increased vaginal blood flow. Regular sexual activity can also help to maintain vaginal health. Dilator therapy can be extremely helpful in treating vaginal discomfort of women who do not desire sexual activity or who do not have a sexual partner. It is possible that stimulation using a clitoral therapy device (e.g. Eros) or regular, arousing self-stimulation may be as effective in dilating the vagina through increased blood flow and related tissue health as dilation. It is unclear from the evidence whether dilators work through mechanical stretching or through arousal.

Vaginal Estrogen

Topical or systemic estrogen therapy is an effective treatment for vaginal atrophy for postmenopausal women in the general population. However, hormone replacement is a complex issue in regard to cancer survivors. Starting hormone therapy necessitates a discussion of the treatment's risks, benefits, and alternatives.

For a more comprehensive review of the information and research found within this handout please refer to:

Carter, J. Goldfrank, D., & Schover, L. R. (2011). Simple strategies for vaginal health promotion in cancer survivors. *Journal of Sexual Medicine*, 8, 549-559. Doi: 10.111/j.1743-6109.2010.01988