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**Title:**

Primary Care Management of Late and Long-Term Effects of Oncological Treatments in Uterine Cancer Survivors

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**Session Title:**

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**References:**

Akkuzu et al., (2016). Learning needs of gynecologic cancer survivors. *J Canc Educ*. doi: 10.1007/s13187-016-1118-y

Dobrzycka, B., et al., (2017). Quality of life in long-term survivors of early stage endometrial cancer. *Ann Agric Environ Med* 24(3) 513-516. doi:10.5604/12321966.1232759

- Erikson, C., et al., (2007). Future supply and demand for oncologists: challenges tossing access to oncology services. *J Oncol Pract* 3(2):79-86.
- Elit, L., and C. Reade. (2015). Recommendations for follow-up care for gynecologic cancer survivors. *Obstet Gynecol* 126:1207-1214. doi: 10.1097/AOG.0000000000001129
- Griffiths, C., Kwon, N., Beaumont, J. L., & Paice, J. A. (2018). Cold therapy to prevent paclitaxel-induced peripheral neuropathy. *Supportive Care in Cancer*, 26(10), 3461-3469. doi:10.1007/s00520-018-4199-9
- Hudson, S., et al., (2012). Adult cancer survivors discuss follow-up in primary care: 'Not what I want, but maybe what I need.' *Ann Fam Med* 10(5): 418-427.
- Huffman, L., et al., (2016). Maintaining sexual health throughout gynecologic cancer survivorship: A comprehensive review and clinical guide. *Gynecol Oncol*. doi: 10.1016/j.ygyno.2015.11.010
- Lee JJ, Swain SM. Peripheral neuropathy induced by microtubule-stabilizing agents. *J Clin Oncol* 2006; 24:1633.
- Manson, J., and A. Kaunitz. (2016). Menopause management: getting clinical care back on track. *N Engl J Med* 347:803-806. doi:10.1056/NEJMp1514242
- Miller, K., et al., (2016). Cancer treatment and survivorship statistics, 2016. *Ca Cancer J Clin*. 66(4)271-289. doi:10.3322/caac.21349.
- National Comprehensive Cancer Network (2017). Uterine cancer. *NCCN Practice Guidelines in Oncology*. [https://www.nccn.org/professionals/physician\\_gls/pdf/uterine.pdf](https://www.nccn.org/professionals/physician_gls/pdf/uterine.pdf)
- SEER Stat Fact Sheets: Corpus and Uterus, NOS. [seer.cancer.gov/statfacts/html/corp.html](http://seer.cancer.gov/statfacts/html/corp.html) (Accessed on September 02, 2013)
- Siegel, R.L, Miller, K.D., and A. Jemal. (2017). Cancer statistics, 2017. *CA Cancer J. Clin*. 67(7) 8-13. doi: 10.3322/caac.21387
- Shisler, R., et al., (2017). Life after endometrial cancer: A systematic review of patient reported outcomes. *Gynecol Oncol*. doi:10.1016/j.ygyno.2017.11.007
- von Gruenigen VE, Waggoner SE, Frasure HE, et al. Lifestyle challenges in endometrial cancer survivorship. *Obstet Gynecol* 2011; 117:93.

**Abstract Summary:**

Nurse practitioners serving as primary care providers are in a unique position to provide long-term symptom management for uterine cancer survivors. This poster summarizes common concerns of uterine cancer survivors and suggests possible symptom management and treatment options for both the late and long-term effects associated with various oncological therapies.

## **Content Outline:**

### **I. INTRODUCTION**

1. Increasing prevalence of gynecological cancer survivors
  1. Approximately 61,380 new cases of uterine corpus cancer occur annually. (Seigal, Miller, Jemal, 2017)
  2. The 5 and 10 year survival data associated with that diagnosis are 82% and 79% respectively. (Hudson et al., 2016)
  3. Continually increasing prevalence of uterine cancer could be due to increase in aging population and parallel increase in the obese population, as obesity is a known risk factor for uterine cancer. (SEER, 2013).
  4. The combination of increasing prevalence and impressive, increasing survival data results in a survivorship environment where the “volume of patients to be followed is high” (Elit and Reade, 2015).
2. A medical oncologist shortage is anticipated (Erikson, et al., 2007).
3. With an increasing number of patients needing cancer care and a decreasing number of oncology providers, NPs are well positioned to fill the void. Symptom management of common survivorship complaints fall within scope of primary care providers.
  1. Due to these constraints, “in the future, higher proportion of follow up care is likely to be provided by primary care providers such as general gynecologists...” (Elit and Reade, 2015)
  2. Breast and prostate cancer survivors currently report feeling as though their primary care providers are not attuned to needs their needs as cancer survivors, but they’re interested in having primary care be more familiar/looped in with their cancer care (Hudson et al., 2012).

### **II. OBJECTIVES**

1. To summarize for non-gynecological oncology providers the common quality of life concerns of uterine cancer survivors
2. To provide succinct suggestions for symptom management/treatment, within the scope of primary care providers, where possible.

### **III. BODY**

1. Uterine Cancer Standard-of-Care Treatment:
  1. Standard-of-care treatment is based upon staging, but generally includes, as outlined by the National Comprehensive Cancer Network, surgical removal of the uterus, with or without the fallopian tubes, with or without the ovaries. (NCCN, 2017)

2. Radiation—via Vaginal brachytherapy or external beam radiation—may be used as an addition to surgery. (NCCN, 2017)
  3. If the cancer is identified through pathology to be high-risk (serous carcinoma, clear cell carcinoma, carcinosarcoma), chemotherapy is considered as an adjuvant treatment. Initial chemotherapeutic regimens include a combination of medications, each of which has a different mechanism of action. Carboplatin and paclitaxel or cisplatin and doxorubicin are common regimens; this paper focuses on management of late and long term effects associated with these medications and the aforementioned surgical and radiation therapies (NCCN, 2017).
2. Late and Long-term effects of Treatment:
1. Lymphedema:
    1. Lymphedema is especially common if radiation as part of treatment (Miller et al., 2016)
    2. In patients with lymphedema, there is no significant difference in quality of life whether or not they underwent surgical lymphadenectomy. (Shisler et al., 2017)
  2. Bowel/bladder symptoms
    1. Bowel and bladder symptoms are especially likely if radiation was a part of treatment. (Hudson et al., 2016)
    2. Bowel and bladder symptoms are recognized as long-term side effects of radiation therapy. (Miller et al., 2016)
  3. Neuropathy is common in patients treated with taxane chemotherapies such as paclitaxel. (Miller et al., 2016)
    1. Paclitaxel associated with proximal muscle neuropathy in 14% of patients (Lee et al., 2006).
    2. Paclitaxel-induced peripheral neuropathy significantly impacts quality of life and the patients ability to perform basic activities of daily living due to loss of manual dexterity and impairments in gait and mobility (Griffiths, Kwon, Beaumont, & Paice, 2018)
  4. Fertility
    1. Any hysterectomy causes infertility (Miller et al., 2016).
    2. Some women may have harvested eggs prior to treatment.
  5. Menopausal symptoms
    1. Menopausal symptoms are likely to vary in severity depending on factors like patient's menopausal status at time of treatment, and the surgical and chemotherapeutic treatment decisions made.

2. The most common menopausal symptoms reported by women following treatment for uterine cancer include hotflashes, nightsweats, atrophic vaginitis, and osteoporosis.(Hudson et al., 2016).

6. Female Sexual dysfunction (FSD):

1. 68.8% of uterine cancer patients report female sexual dysfunction through symptom complaints including less desire, fewer climaxes, or pain associated with sex. (Gao, et al., 2017)
2. The most commonly reported symptoms include dryness, less interest, less sexual activity, and less enjoyment than age-matched controls. (Huffman et al., 2016)
3. Surgery with or without radiation is associated with vaginal morbidity and decreased sexual interest, arousal and satisfaction. (Huffman et al., 2016)
4. Common patient complaints include dyspareunia, vaginal atrophy and vaginal stenosis (Huffman et al., 2016)
5. Over half of women never have intercourse after cancer-related surgery. (gao et al, 2017)
6. The biggest determinant of sexual function in uterine cancer survivors wasn't the inclusion of radiation in treatment, but was the surgical approach of laparotomy vs laparoscopy. (Shisler et al., 2017)
7. Patients who consulted a physician prior to or during treatment suffered less sexual dysfunction than their counterparts. (Shisler et al., 2017)

7. Non specific:

1. Post-treatment patients suffer with non-specific symptoms including but not limited to stress, fatigue, changes in sexual function, and depression more than their healthy counterparts, and these non-specific symptoms lead to lower quality of life. (Shisler et al., 2017)
2. An additional consideration in this population is the fear of recurrence (Miller at al., 2016), which can exacerbate non-specific symptoms.

3. Interventions:

1. Interventions for lymphedema:

1. Manual pumps
2. Mechanical pumps
3. Referral to PT specialist
4. Massage

2. Interventions for bowel/bladder symptoms
3. Interventions for Neuropathy
  1. gabapentin
  2. 100mg vitamin B6
4. Interventions for Fertility Problems
  1. Referral to appropriate reproductive endocrinology and infertility specialist.
5. Interventions for Menopausal Complaints
  1. One effective treatment for menopausal complaints is the administration of low dose, transdermal hormone (Manson and Kaunitz, 2016). Because of a still-controversial potential for increased risk of recurrence, PCPs should consult the patient's treating oncologist before prescribing.
  2. For many patients, selective serotonin reuptake inhibitors and/or gabapentin may offer relief. (Manson and Kaunitz, 2016)
6. Interventions for FSD:
  1. The incidence of FSD is lower in patients who consulted with their doctors regarding changed associated with sexual experience prior to cancer treatment. (Gao et al, 2017)
  2. The most important intervention providers can offer their patients is the opportunity to air and address concerns regarding sexual health. (Huffman et al., 2016).
    1. During this conversation, providers should ask about his or her patient's relationship, partner's health, and partner's sexual health.
  3. Helpful for providers to reassure patients of the myriad of treatments available, then be certain to document already-tried strategies (Huffman et al., 2016)
  4. PCPs should then ask at regular intervals about their patients' pre cancer sexual activity, current activity and how cancer has affected activity experience or frequency. To aid in this conversation, the NCCN recommends the brief sexual symptom checklist for women (Huffman et al., 2016).
  5. Medication Reconciliation
    1. Although most PCPs already perform medication reconciliation during a visit, a survivorship visit requires a new lens. For example, if a patient is on an SSRI, consider switching to bupropion (Huffman, et al., 2016) to better manage sexual side effects, without —hopefully—losing efficacy in treatment of depression or neuropathy. The PCP can manage medications to find the balance most amenable to the patient.

6. If the PCP is comfortable, he or she can perform a standard pelvic exam, with vulvar mapping if pain is reported (Huffman sure). This can aid in identifying the source of the pain, to inform treatment and referral decisions
7. In post-treatment patients, psychosexual counseling improved sexual function and quality of life significantly. (Gao et al, 2017).
8. Psychotherapy is common and should be addressed before arousal problems.(Huffman et al, 2016).
9. OTC/RX:
  1. PCPs can prescribe or suggest vaginal moisturizers to improve vaginal health, tissue quality and comfort (Huffman et al., 2016).
  2. Lubricants can be easily applied to minimize dryness and discomfort temporarily during sexual activity (Huffman et al., 2016).
  3. Dilators can be used to gain desired vaginal capacity if the patient is reporting dyspareunia, stenosis, or vaginal shortening (Huffman et al., 2016).
10. The PCP can consider prescribing systemic estrogen therapy, with clearance from the patient's medical oncologist. (Huffman et al., 2016).
11. RX; Ospheña (Huffman et al., 2016)
  1. Alternatively, Ospheña is a PO pill for atrophy and severe dyspareunia in postmenopausal women.
  2. Ospheña works as an estrogen receptor modulator, but it has not yet been studied in cancer populations
12. RX: Flibanserin (Huffman et al., 2016).
  1. Flibanserin is an option for premenopausal women with decreased sexual desire, but it should be prescribed with caution due to a black box warning for hypotension and syncope
13. Referrals:
  1. PCPs can act as the coordinator for many providers involved in a cancer patient's continuing and changing sexual health needs. He or she can build a team of providers to optimize individual care. This could require referrals for a sexual health provider or a pelvic floor therapist. (Huffman et al., 2016)

## 7. Interventions for Non-Specific Complaints

1. The most effective intervention for non-specific complaints is psychosocial support.(Elit and Reade, 2015)

2. Equally important, however, is that the patient understands both her medical history and future.
  1. For example, 3/4 of patients need education regarding simple topics such as psychological support, comforting techniques, and nutritional decisions. (Akkuzu et al., 2016)
  2. Meanwhile, half of patients believed that sexual intercourse would hurt the vaginal cuff, could prevent healing, or could cause recurrence (gao et al, 2017).
  3. For some patients, addressing weight loss could alleviate complaints associated with decreased quality of life. (Von Gruenigren et al, 2011).
3. Finally, patients across the survivorship spectrum can benefit from the reminder that life will normalize.
  1. For patients diagnosed at an early stage, quality of life three years following treatment approximately matches that of their unaffected peers. (Dobrzycka et al., 2017).

#### **IV. CONCLUSION & CLINICAL IMPLICATIONS**

1. Despite this encouraging data, patients treated for uterine cancer struggle with long-term and late effects associated with surgeries, radiation, and chemotherapy. They manage lymphedema, bowel and bladder symptoms, neuropathy, fertility challenges, menopausal effects, sexual changes, and a myriad of non-specific symptoms following the conclusion of treatment.
2. It is encouraging that this population of uterine cancer survivors is continuing to increase,, but these patients need resources for support and resolution of these issues.
  1. Survivorship clinics beginning to establish themselves in major metropolitan areas, but this is not a feasible solution for rural patients.
  2. Patients are interested in PCPs being more involved in cancer care (Hudson, 2012).
  3. In the meantime, let this article be a step toward educating able providers who may be more easily accessible to patients.

#### **Topic Selection:**

Clinical Poster Session 2 (Monday/Tuesday, 18 & 19 November) (26148)

#### **Abstract Text:**

The population of uterine cancer survivors in the United States is continuously increasing, due to both a slight increase in incidence and to impressive survivorship statistics. The rising incidence could be attributed to increases in the aging and obese populations, as both age and obesity are established risk factors for uterine cancer (SEER, 2013). An estimated 61,380 cases of uterine corpus cancer are



diagnosed annually, (Siegal, Miller, Jemal, 2017); of these patients, 82% can expect to live five years and 79% survive ten years or more following diagnosis (Hudson et al., 2016). The simultaneous increase in incidence and in anticipated survival result in a high volume of uterine cancer patients requiring follow up (Elit and Reade, 2015), while the number of available oncology appointments is expected to increase much more modestly (Yang et al., 2014). Due to this imbalance, a higher proportion of follow-up care is expected to shift to primary care providers and/or general gynecologists (Elit and Reade, 2015). Thus, primary care providers, especially nurse practitioners, must be prepared to understand and address the specific needs of the uterine cancer survivor population and the lasting effects of the various treatments patients may have received.

Long-term needs of uterine cancer survivors vary depending upon oncologic treatment, which can consist of any combination of surgery, radiation, and chemotherapy. The standard-of-care treatment for uterine cancer is based upon staging, but generally includes surgical removal of the uterus, with or without the fallopian tubes, with or without the ovaries (NCCN, 2017). External-beam radiation or vaginal brachytherapy may be used in addition to surgery (NCCN, 2017). Finally, if the cancer is identified through pathology to be high-risk (serous carcinoma, clear cell carcinoma, carcinosarcoma), chemotherapy is considered as an adjuvant treatment. Initial chemotherapeutic regimens include a combination of medications, each of which has a different mechanism of action. Carboplatin and paclitaxel or cisplatin and doxorubicin are common initial pharmacotherapeutic treatments.

Nurse practitioners serving as primary care providers are in a unique position to provide long-term symptom management for uterine cancer survivors. This poster summarizes the common concerns of uterine cancer survivors and suggests possible symptom management and treatment options for both the late and long-term effects associated with various oncological therapies mentioned above.