Survivorship: Sexual Dysfunction (Female), Version 1.2013


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Overview
Cancer treatment, especially hormonal therapy and therapy directed toward the pelvis, can often impair sexual function. In addition, depression and anxiety, which are common in survivors, can contribute to sexual problems. Thus, sexual dysfunction is common in survivors and can cause increased distress and have a significant negative impact on quality of life. This section of the NCCN Guidelines for Survivorship provides screening, evaluation, and treatment recommendations for female sexual problems, including those related to sexual desire, arousal, orgasm, and pain. (*J Natl Compr Canc Netw* 2014;12(184–192))

NCCN Categories of Evidence and Consensus
**Category 1:** Based upon high-level evidence, there is uniform NCCN consensus that the intervention is appropriate.

**Category 2A:** Based upon lower-level evidence, there is uniform NCCN consensus that the intervention is appropriate.

**Category 2B:** Based upon lower-level evidence, there is NCCN consensus that the intervention is appropriate.

**Category 3:** Based upon any level of evidence, there is major NCCN disagreement that the intervention is appropriate.

All recommendations are category 2A unless otherwise noted.

Clinical trials: NCCN believes that the best management for any cancer patient is in a clinical trial. Participation in clinical trials is especially encouraged.

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Survivorship

NCCN Guidelines

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and have a significant negative impact on quality of life. Nonetheless, sexual function is often not discussed with survivors. Reasons for this include a lack of training of health care professionals, discomfort of providers with the topic, and insufficient time during visits for discussion. However, effective strategies for treating both female and male sexual dysfunction exist, making these discussions a critical part of survivorship care.

Female Aspects of Sexual Dysfunction

Female sexual problems relate to issues such as sexual desire, arousal, orgasm, and pain. Sexual dysfunction after cancer treatment is common in female survivors. A survey of 221 survivors of vaginal and cervical cancer found that the prevalence of sexual problems was significantly higher among survivors than among age- and race-matched controls from the National Health and Social Life Survey (mean number of problems 2.6 vs 1.1; P<.001). A survey of survivors of ovarian germ cell tumors and age-, race-, and education-matched controls found that survivors reported a significant decrease in sexual pleasure.

Female sexual dysfunction varies with cancer site and treatment modalities. For example, survivors of cervical cancer who were treated with radiotherapy had worse sexual functioning scores (for arousal, lubrication, orgasm, pain, and satisfaction) than those treated with surgery, whose sexual functioning was similar to that of age- and race-matched controls. A survey of 221 survivors of vaginal and cervical cancer found that the prevalence of sexual problems was significantly higher among survivors than among age- and race-matched controls from the National Health and Social Life Survey (mean number of problems 2.6 vs 1.1; P<.001). A survey of survivors of ovarian germ cell tumors and age-, race-, and education-matched controls found that survivors reported a significant decrease in sexual pleasure.

Female sexual dysfunction varies with cancer site and treatment modalities.

**NCCN Survivorship Panel Members**

- * Crystal S. Denlinger, MD/Chair†
  - Fox Chase Cancer Center

- Robert W. Carlson, MD/Immediate Past Chair†
  - Stanford Cancer Institute

- *Madhuri Are, MD†
  - Fred & Pamela Buffett Cancer Center at The Nebraska Medical Center

- K. Scott Baker, MD, MSE†
  - Fred Hutchinson Cancer Research Center/Seattle Cancer Care Alliance

- *Elizabeth Davis, MD†
  - Tewksbury Hospital

- Stephen B. Edge, MD¶
  - Roswell Park Cancer Institute

- *Debra L. Friedman, MD, MSE†
  - Vanderbilt-Ingram Cancer Center

- *Mindy Goldman, MD, MS#¶
  - UCSF Helen Diller Family Comprehensive Cancer Center

- *Lee Jones, PhDDI†
  - Duke Cancer Institute

- *Allison King, MD‡
  - Siteman Cancer Center at Barnes-Jewish Hospital and Washington University School of Medicine

- *Elizabeth Kvale, MDÆ
  - University of Alabama at Birmingham Comprehensive Cancer Center

- *Terry S. Langbaum, MASΨ
  - The Sidney Kimmel Comprehensive Cancer Center at Johns Hopkins

- *Jennifer A. Ligibel, MD†
  - Dana-Farber/Brigham and Women’s Cancer Center

- *Mary S. McCabe, RN, BS, MS§
  - Memorial Sloan-Kettering Cancer Center

- *Kevin T. McVary, MDΩ
  - Robert H. Lurie Comprehensive Cancer Center of Northwestern University

- Michelle Melisko, MD†
  - UCSF Helen Diller Family Comprehensive Cancer Center

- Jose G. Montoya, MDΦ
  - Stanford Cancer Institute

- *Kathi Mooney, RN, PhD#†
  - Huntsman Cancer Institute at the University of Utah

- *Mary Ann Morgan, PhD, FNP-BC#†
  - Moffitt Cancer Center

- Tracey O’Connor, MD†
  - Roswell Park Cancer Institute

- *Electra D. Paskett, PhD€
  - The Ohio State University Comprehensive Cancer Center - James Cancer Hospital and Solove Research Institute

- *Muhammad Raza, MD‡
  - St. Jude Children’s Research Hospital/The University of Tennessee Health Science Center

- *Karen L. Syrjala, PhD¶
  - Fred Hutchinson Cancer Research Center/Seattle Cancer Care Alliance

- *Susan G. Urba, MD†£
  - University of Michigan Comprehensive Cancer Center

- *Mark T. Wakabayashi, MD, MPHΩ
  - City of Hope Comprehensive Cancer Center

- *Phyllis Zee, MDΦ†
  - Robert H. Lurie Comprehensive Cancer Center of Northwestern University

**NCCN Staff:** Nicole McMillian, MS, and Deborah Friedman-Cass, PhD

**KEY:**

*Writing Committee Member

Subcommittees: *Anxiety and Depression; Cognitive Function; Exercise; Fatigue; Immunizations and Infections; Pain; Sexual Function; Sleep Disorders

Specialties: *Bone Marrow Transplantation; Epidemiology; Exercise/Physiology; Gynecology/Gynecologic Oncology; Hematology/Hematology Oncology; Infectious Diseases; Internal Medicine; Medical Oncology; Neurology/Neuro-Oncology; Nursing; Patient Advocacy; Pediatric Oncology; Psychiatry, Psychology, Including Health Behavior; Supportive Care Including Palliative, Pain Management, Pastoral Care, and Oncology Social Work; Surgery/Surgical Oncology; Urology

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DIAGNOSTIC EVALUATION

- Ask about sexual function at regular intervals
- Use the Brief Sexual Symptom Checklist as a primary screening tool
- Review present and past level of sexual activity and discuss the potential impact of therapy. Discuss any sexual concerns and how cancer treatment has affected sexual functioning and intimacy
- Discuss treatment-associated infertility if indicated, with appropriate referrals

No concerns for sexual dysfunction

- H&P
  - Sexual history
    - Past medical, surgical, and obstetric histories (nononcologic)
    - Identify traditional risk factors (eg, cardiovascular disease, diabetes mellitus, smoking, alcoholism, obesity, menopause)
  - Psychosocial history
    - Including relationship status/issues, drug and alcohol use
    - Screen for psychosocial concerns (See SANXDE-1* and NCCN Clinical Practice Guidelines in Oncology [NCCN Guidelines] for Distress Management†)
    - Depression
    - Anxiety
    - Relationship issues
  - Review oncologic history
    - Diagnosis/stage
    - Surgeries
    - Systemic treatment
    - Local RT
  - Use of prescription and over-the-counter medications (especially hormone therapy or opioids)

Concerns for sexual dysfunction

- Reevaluate at subsequent visits/posttherapy

See Additional Evaluation and Treatment (SSFF-2)

- Appropriate referrals for psychotherapy, sexual/couples counseling, or gynecologic care

*Available online, in the full version of these guidelines, at NCCN.org.
†To view the most recent version of these guidelines, visit NCCN.org.

See Brief Sexual Symptom Checklist for Women (SSFF-A).
ADDITIONAL EVALUATION | TREATMENT | POSTTREATMENT EVALUATION

- Evaluate for the following categories of female sexual dysfunctions:
  - Sexual desire disorder
  - Sexual arousal disorder
  - Female orgasm disorder
  - Sexual pain disorder
- Discuss concerns related to specific cancer therapies
- If treatment-related menopause, assess symptoms and effects on sexual functioning
- Perform physical and gynecologic exam to note points of tenderness, vaginal atrophy, and anatomic changes associated with cancer surgeries and treatments
- For more in-depth evaluation of sexual dysfunction, consider the Female Sexual Function Index (FSFI)\(^a\)

- Guide treatment to specific type of female sexual dysfunction:
  - Use of water-, oil-, or silicone-based lubricants and moisturizers
  - Vaginal dilators/vibrators
  - Relaxation techniques or exercises
    - Pelvic physical therapy helpful for anatomical changes and dyspareunia
  - Topical estrogen therapy if not contraindicated by tumor type (with education regarding risks)
    - Base the type of local estrogen on exam findings and patient preference (pills, vaginal rings, creams)
  - Encourage ongoing partner communication
  - Identify sources for psychosocial dysfunction with appropriate referrals for psychotherapy or sexual/couples counseling

- Concerns for sexual dysfunction improved or resolved
- Use the Brief Sexual Symptom Checklist\(^a\)
- Reevaluate at subsequent visits/post therapy
- Ongoing concerns for sexual dysfunction
- Repeat evaluation and treatment options, with appropriate referrals for psychotherapy, sexual counseling as indicated

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\(^a\)See Brief Sexual Symptom Checklist for Women (SSFF-A).

SSFF-2
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Clinical trials: NCCN believes that the best management of any cancer patient is in a clinical trial. Participation in clinical trials is especially encouraged. All recommendations are category 2A unless otherwise indicated.

BRIEF SEXUAL SYMPTOM CHECKLIST FOR WOMEN

Please answer the following questions about your overall sexual function:

1. Are you satisfied with your sexual function?
   __ Yes __ No
   If no, please continue.

2. How long have you been dissatisfied with your sexual function?

3a. The problem(s) with your sexual function is:
   (mark one or more)
   __ 1 Problem with little or no interest in sex
   __ 2 Problem with decreased genital sensation (feeling)
   __ 3 Problem with decreased vaginal lubrication (dryness)
   __ 4 Problem reaching orgasm
   __ 5 Problem with pain during sex
   __ 6 Other:

3b. Which problem is most bothersome? (circle)
   1 2 3 4 5 6

4. Would you like to talk about it with your doctor?
   __ Yes __ No

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SSFF-A
noncancer controls. A recent systematic review of sexual functioning in cervical cancer survivors found similar results, except that no differences in orgasm/satisfaction were observed. In contrast, chemotherapy seems to be linked to female sexual dysfunction in breast cancer survivors, possibly related to the prevalence of chemotherapy-induced menopause in this population. In addition, survivors with a history of hematopoietic stem cell transplantation (HSCT) may have multiple types of sexual dysfunction, even after 5 to 10 years. Some of the sexual dysfunction associated with HSCT is related to graft-versus-host disease (GVHD), which can result in vaginal fibrosis, stenosis, mucosal changes, vaginal irritation, bleeding, and increased sensitivity of genital tissues. In addition, high-dose corticosteroids used for chronic GVHD can increase emotional lability and depression, affecting feelings of attractiveness, sexual activity, and quality of sexual life.

**Evaluation and Assessment for Female Sexual Function**

At regular intervals, female cancer survivors should be asked about their sexual function, including their sexual functioning before cancer treatment, their present activity, and how cancer treatment has impacted their sexual functioning and intimacy. The age and relationship status of the survivor may also affect sexual functioning (ie, some women may not be sexually active because of the physical health of their partner or quality of their relationship). The Brief Sexual Symptom Checklist for Women can be used as a primary screening tool. Inquiries into treatment-related infertility should be made if indicated, with referrals as appropriate.

Patients with concerns about their sexual function should undergo a more thorough evaluation, including screening for possible symptoms and psychosocial problems (ie, anxiety, depression, relationship issues, drug or alcohol use) that can contribute to sexual dysfunction. It is also important to identify prescription and over-the-counter medications (especially hormone therapy, narcotics, and serotonin reuptake receptor inhibitors) that could be a contributing factor. Traditional risk factors for sexual dysfunction, such as cardiovascular disease, diabetes, obesity, smoking, and alcohol abuse, should also be assessed, as should the oncologic and treatment history. If anticancer treatments have resulted in menopause, menopausal symptoms and effects on sexual function should be assessed. Risks and benefits of hormone therapy should be considered in women who have not had hormone-sensitive cancers and who are prematurely postmenopausal. In addition, a physical and gynecologic examination should be performed to note points of tenderness, vaginal atrophy, and anatomic changes associated with cancer and cancer treatment.

For a more in-depth evaluation of sexual dysfunction, the Female Sexual Function Index can be considered. This instrument has been validated in patients with cancer and cancer survivors.

**Interventions for Female Sexual Dysfunction**

Overall, the evidence base for interventions to treat female sexual dysfunction in survivors is weak, and high-quality studies are needed. Based on evidence from other populations, evidence from survivors when available, recommendations from the American College of Obstetricians and Gynecologists, and consensus among NCCN Survivorship Panel members, the panel made recommendations for treatment of female sexual dysfunction in survivors. The panel recommends that treatment be guided to the specific type of problem. The evidence base for each recommendation is described herein.

Water-, oil-, or silicone-based lubricants and moisturizers can help alleviate symptoms such as vaginal dryness and sexual pain. Vaginal estrogen (pills, rings, or creams) has been shown to be effective in treating vaginal dryness and associated with GVHD. However, evidence for the effectiveness of dilators is limited. Vaginal dilators are recommended for vaginismus, sexual aversion disorder, vaginal scarring, or vaginal stenosis from pelvic surgery or radiation and associated with GVHD.

Pelvic floor muscle training may improve sexual pain, arousal, lubrication, orgasm, and satisfaction. A small study of 34 survivors of gynecologic cancers found that pelvic floor training significantly improved sexual function.

Vaginal dilators are recommended for vaginismus, sexual aversion disorder, vaginal scarring, or vaginal stenosis from pelvic surgery or radiation and associated with GVHD. However, evidence for the effectiveness of dilators is limited. Vaginal estrogen (pills, rings, or creams) has been shown to be effective in treating vaginal dryness, itching, discomfort, and painful intercourse in postmenopausal women. Small studies have looked at different formulations of local estrogen, but data assessing the safety of vaginal estrogen in survivors are limited.

Psychotherapy may be helpful for women experiencing sexual dysfunction, although evidence on
effectiveness is limited.\textsuperscript{43} Options include cognitive behavior therapy, for which some evidence of effectiveness exists in survivors of breast, endometrial, and cervical cancer.\textsuperscript{44,45} Referrals for psychotherapy, sexual/couples counseling, or gynecologic care should be given as appropriate, and ongoing partner communication should be encouraged.\textsuperscript{46}

Currently, the panel does not recommend the use of oral phosphodiesterase type 5 inhibitors (PDE5i) for female sexual dysfunction because of the lack of data regarding their effectiveness in women. Although thought to increase pelvic blood flow to the clitoris and vagina,\textsuperscript{47,48} PDE5i showed contradictory results in randomized clinical trials of various noncancer populations of women being treated for sexual arousal disorder.\textsuperscript{49–54} More research is needed before a recommendation can be made regarding the use of sildenafil for the treatment of female sexual dysfunction.

References


## Individual Disclosures for the NCCN Survivorship Panel

<table>
<thead>
<tr>
<th>Panel Member</th>
<th>Clinical Research</th>
<th>Advisory Boards, Speakers Bureau, Expert Witness, or Consultant</th>
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<th>Date Completed</th>
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<tbody>
<tr>
<td>Madhuri Are, MD</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>5/15/13</td>
</tr>
<tr>
<td>K. Scott Baker, MD, MS</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>11/22/13</td>
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<tr>
<td>Robert W. Carlson, MD</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>12/9/13</td>
</tr>
<tr>
<td>Elizabeth Davis, MD</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>3/13/12</td>
</tr>
<tr>
<td>Crystal S. Denlinger, MD</td>
<td>ImClone Systems Incorporated; MedImmune Inc.; and Merrimack Pharmaceuticals</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>6/21/13</td>
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<tr>
<td>Stephen B. Edge, MD</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
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<tr>
<td>Debra L. Friedman, MD, MS</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>5/26/13</td>
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<tr>
<td>Mindy Goldman, MD</td>
<td>Pending</td>
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<tr>
<td>Lee Jones, PhD</td>
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<tr>
<td>Allison King, MD</td>
<td>None</td>
<td>None</td>
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<td>8/12/13</td>
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<tr>
<td>Elizabeth Kvale, MD</td>
<td>None</td>
<td>None</td>
<td>None</td>
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<td>10/7/13</td>
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<tr>
<td>Terry S. Langbaum, MAS</td>
<td>None</td>
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<td>8/3/13</td>
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<tr>
<td>Jennifer A. Ligibel, MD</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>10/3/13</td>
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<tr>
<td>Mary S. McCabe, RN, BS, MA</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>8/12/13</td>
</tr>
<tr>
<td>Kevin T. McVary, MD</td>
<td>Allergan, Inc.; Eli Lilly and Company; NeoTract, Inc.; and National Institute for Diabetes and Digestive and Kidney Diseases</td>
<td>Allergan, Inc.; GlaxoSmithKline; Eli Lilly and Company; and Watson Pharmaceuticals Inc.</td>
<td>None</td>
<td>None</td>
<td>6/7/13</td>
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<tr>
<td>Michelle Melisko, MD</td>
<td>Celldex Therapeutics; and Galena Biopharma</td>
<td>Agendia BV; Genentech, Inc.; and Novartis Pharmaceuticals Corporation</td>
<td>None</td>
<td>None</td>
<td>10/11/13</td>
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<tr>
<td>Jose G. Montoya, MD</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>12/6/13</td>
</tr>
<tr>
<td>Kathi Mooney, RN, PhD</td>
<td>University of Utah</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>9/30/13</td>
</tr>
<tr>
<td>Mary Ann Morgan, PhD, FNP-BC</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>8/19/13</td>
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<tr>
<td>Tracey O’Connor, MD</td>
<td>None</td>
<td>None</td>
<td>None</td>
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<tr>
<td>Electra D. Paskett, PhD</td>
<td>Merck &amp; Co., Inc.</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>6/13/13</td>
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<tr>
<td>Muhammad Raza, MD</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>8/23/12</td>
</tr>
<tr>
<td>Karen L. Syrjala, PhD</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>10/3/13</td>
</tr>
<tr>
<td>Susan G. Urba, MD</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>10/9/13</td>
</tr>
<tr>
<td>Mark T. Wakabayashi, MD, MPH</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>6/19/13</td>
</tr>
<tr>
<td>Phyllis Zee, MD</td>
<td>Philips/Respirronics</td>
<td>Merck &amp; Co., Inc.; Sanofi-Aventis Japan; UCB, Inc.; and Purdue Pharma L.P.</td>
<td>None</td>
<td>None</td>
<td>4/5/12</td>
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