Background  With more than 14 million cancer survivors in the United States, sexual dysfunction related to disease and/or therapy is an increasingly prevalent problem (1). This Fast Fact will review strategies to address and clinically manage this complex quality-of-life issue. See Fast Fact #284 for more information on opioid induced androgen deficiency.

Demographics  Although all cancer patients and survivors are at risk for sexual dysfunction, those with malignancies involving sexual or pelvic organs and those undergoing treatments that affect sexual hormones appear to be at highest risk. Almost half of prostate cancer patients report severe levels of sexual concerns (2,3); over half of breast cancer survivors report persistent difficulties in sexual functioning (4). Manifestations of sexual dysfunction include physical symptoms (e.g. erectile dysfunction, dyspareunia), emotional symptoms (e.g. disinterest in sex, poor body image), and interpersonal challenges (e.g. change in relationship roles from sexual partners to caregiver-patient).

Assessment  Despite high prevalence, assessment is not routinely performed in oncology or primary care offices. Barriers include patient/provider reluctance to discuss the topic, lack of assessment training, and lack of standardized sexuality questionnaires (5-7). When sexuality is addressed, there is often a mismatch of priorities between patient (often focused on coping with sexual changes and loss of intimacy) and provider (often focused on contraception, fertility, and menopausal issues)(5,8). Because patients usually do not seek treatments on their own, experts recommend incorporating open-ended questions which normalize such concerns into routine clinical assessments. For example, “Many patients who have been treated for cancer experience sexual problems; do you have similar experiences (5,9)?” When sexual dysfunction is detected, a more thorough history should include phase(s) of sexual response cycle affected, association with cancer diagnosis/therapy, concomitant symptoms, and whether the symptoms affect masturbation and/or sexual activity with partner (9).

Management strategies  Providers should attend to comorbid aggravating factors of sexual function such as thyroid dysfunction, long-term chronic opioid therapy, and use of anti-depressants such as SSRIs. Most patients prefer physiological over psychological solutions; however, clinical research outcomes for many of the physiological therapies are mixed (8).

Physiological  
- Vaginal dilators are often recommended to prevent stenosis after pelvic radiation, but clinical evidence of efficacy and tolerability are lacking (10).
- Preliminary evidence supports the use of vaginal estrogen replacement therapy (i.e. low-dose estradiol rings, estradiol creams or conjugated estrogen creams) for vaginal dryness and dyspareunia, but long-term efficacy and safety have not been established (11,12). Thus, non-hormonal vaginal moisturizers and lubricants are often first line therapy for these symptoms (13). Oral hormone replacement is often avoided due to the increased risk of breast cancer.
- Short-term (< 12 months) testosterone replacement may be helpful in select patients with testosterone deficiency, but it should be prescribed with caution due to concern for an increased risk in prostate cancer (14). See Fast Facts #284.
- Oral PDE-5 inhibitors (such as sildenafil), vacuum erection devices, penile prosthesis, and intracavernous injections (such as alprostadil) have been shown to be effective in iatrogenic erectile dysfunction from cancer therapy (15-19).
- Some experts advise that patients should avoid sexual intercourse if the malignancy is present in the genital tract, if the patient is still healing from genital surgery, or if neutropenia (ANC<1000) and/or thrombocytopenia (platelets<50,000) is present to minimize the bleeding and infection risk.
- Patients commonly ask if chemotherapy can cause adverse effects in partners with whom they are sexually intimate. Available medical evidence suggests that this risk is minimal to non-existent.

Psychological
Although attrition levels are high, participation in more than 3 sessions of cognitive behavioral stress management, relaxation training, sexual education, or sexual counseling may reduce sexual dysfunction in cancer patients or survivors (8).

Partner participation during therapy may help enhance sexual intimacy and body image (20).

Some experts recommend flexible coping strategies. Flexible coping focuses on identifying the cognitive and behavioral changes which have occurred around the construct of sexuality. Then, rather than utilizing a strict definition of sexual intercourse as the goal to sexual activity, individuals are encouraged to reimagine sexual activity as a continuum of non-intercourse to intercourse intimacy activities as they become accustomed to their sexual changes (21).

Summary Providers caring for cancer survivors often miss sexual dysfunction, which is a prevalent cause of distress and quality of life impairment. Routine open-ended questions exploring sexual function should help to more broadly identify these issues in cancer patients.

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