AMERICAN CANCER SOCIETY/AMERICAN SOCIETY OF CLINICAL ONCOLOGY BREAST CANCER SURVIVORSHIP CARE GUIDELINE SUMMARY

Assessment and Management of Long-term and Late Effects

SEXUAL FUNCTION AND FERTILITY

- Assess for sexual dysfunction or problems with sexual intimacy including sexual desire disorder (M-H), arousal or lubrication concerns (L-M), dyspareunia (M), orgasm concerns (M), loss of sexual function (U), loss of sexual sensitivity of the skin (U), vaginal dryness (U)
- Assess for reversible contributing factors and treat when appropriate
- Offer nonhormonal, water-based lubricants and moisturizers for vaginal dryness
- Refer for psychoeducational support, group therapy, sexual counseling, marital counseling or intensive psychotherapy when appropriate
- Refer survivors of childbearing age who experience infertility to a specialist in reproductive endocrinology and infertility

COGNITIVE FUNCTION

- Ask patients if they are experiencing cognitive difficulties (problems with concentration, executive function and memory; in treatment (H), after treatment (M))
- Assess for reversible contributing factors of cognitive impairment and treat when possible
- Refer patients with signs of cognitive impairment for neurocognitive assessment and rehabilitation, including group cognitive training if available

MUSCULOSKELETAL HEALTH

- Assess for musculoskeletal symptoms by asking about symptoms at each encounter
- Ask about:
  - Numbness of upper extremity/limb (M-H)
  - Musculoskeletal pain (L-H)
  - Difficulties with ipsilateral upper extremity: decreased/limited range of motion (L-H)
  - Myalgias (M)
  - Arthralgias (M)
  - Weakness of upper extremity/limb (L-M)
  - Axillary web syndrome (U)
  - Difficulties with ipsilateral upper extremity: adhesive capsulitis (U)
  - Difficulties with ipsilateral upper extremity: rotator cuff injury (U)
- Offer one or more of the following interventions based on clinical indication: acupuncture, physical activity, referral for physical therapy or rehabilitation

PREMATURE MENOPAUSE/HOT FLASHES

- Assess for premature menopause including hot flashes (H), changes in menstruation (U), chemotherapy-related early menopause (U)
- Offer SNRIs, selective serotonin reuptake inhibitors (SSRIs), gabapentin, lifestyle modifications and/or environmental modifications to help mitigate vasomotor symptoms of premature menopause

BONE HEALTH

- Assess for bone loss, osteoporosis, osteopenia (H)
- Refer postmenopausal survivors for baseline dual-energy x-ray absorptiometry (DEXA) scan
- Refer for repeat DEXA scans every 2 years for women taking an aromatase inhibitor, premenopausal women taking tamoxifen and/or a gonadotropin-releasing hormone (GnRH) agonist and women who have chemotherapy-induced premature menopause

BODY IMAGE

- Assess for body image/appearance concerns (M-H) including breast asymmetry and atrophy, hair loss, sexual dysfunction/chemotherapy-related early menopause, loss of breast, obesity, poor cosmetic outcome, scarring and/or lymphedema after surgery, skin changes from radiation, skin discoloration, telangiectasia, weight gain
- Offer adaptive devices and/or surgery when appropriate

High prevalence ≥50% (H), Mid Prevalence 21-49% (M), Low-Prevalence ≤20% (L), Unknown Prevalence (U)

Note: This guideline is intended for female breast cancer survivors.

AMERICAN CANCER SOCIETY/AMERICAN SOCIETY OF CLINICAL ONCOLOGY BREAST CANCER SURVIVORSHIP CARE GUIDELINE SUMMARY (CONTINUED)

Assessment and Management of Long-term and Late Effects

PAIN AND NEUROPATHY

- Assess for pain and contributing factors (chronic pain (M-H), lack of skin sensitivity (U), skin sensitivity/pain (U)) with a simple pain scale and history of patient's complaint
- Assess for peripheral neuropathy (M) and contributing factors by asking about symptoms
- Offer interventions for pain
- Refer to appropriate specialist depending on etiology of pain once underlying etiology has been determined
- Offer physical activity for neuropathy
- Offer duloxetine for patients with neuropathic pain, numbness and tingling (M)

DISTRESS, DEPRESSION AND ANXIETY

- Assess for distress (U), depression (L-M) and/or anxiety (L-M)
- Conduct probing assessment for patients at higher risk of depression
- Offer in-office counseling, pharmacotherapy and/or refer to appropriate psycho-oncology and mental health resources as clinically indicated if needed

LYMPHEDEMA

- Counsel on how to prevent/reduce risk of lymphedema (M), including weight loss for those who are overweight or obese
- Refer patients with clinical symptoms or swelling suggestive of lymphedema to therapist knowledgeable about diagnosis and treatment

CARDIOTOXICITY

- Monitor lipid levels and provide cardiovascular monitoring as indicated
- Educate on healthy lifestyle modifications, potential cardiac risk factors and when to report relevant symptoms

FATIGUE

- Assess for fatigue (M-H)
- Treat any causative factors, including anemia, thyroid dysfunction and cardiac dysfunction
- Offer treatment or referral for factors that may impact fatigue for those who do not have an identifiable cause of fatigue
- Counsel patients to engage in regular physical activity and refer for cognitive behavioral therapy as appropriate

OTHER CONSIDERATIONS

More psychosocial effects (U):

- Fear of recurrence
- Fear of pain
- End-of-life concerns: Death and dying
- Changes in sexual function and/or desire
- Challenges with body image
- Challenges with self-image
- Relationship and other social role difficulties
- Return-to-work concerns and financial challenges

High prevalence ≥50% (H), Mid Prevalence 21-49% (M), Low-Prevalence ≤20% (L), Unknown Prevalence (U)

Note: This guideline is intended for female breast cancer survivors.

AMERICAN CANCER SOCIETY/AMERICAN SOCIETY OF CLINICAL ONCOLOGY BREAST CANCER SURVIVORSHIP CARE GUIDELINE SUMMARY (CONTINUED)

SURVEILLANCE AND SCREENING

- H&P every 3-6 months for first 3 years after primary therapy, every 6-12 months for next 2 years and annually thereafter by the treating oncology team
- Refer women who received a unilateral mastectomy for annual mammography on the intact breast and those with lumpectomies for annual mammography of both breasts
- Educate and counsel women about signs and symptoms of local or regional recurrence
- Assess cancer family history and offer genetic counseling if hereditary risk factors are suspected
- Counsel adherence to adjuvant endocrine (antiestrogen) therapy
- Screen for other cancers, as you would the general population
- Provide annual gynecologic assessment for postmenopausal women on selective estrogen receptor modulator therapies

NOT RECOMMENDED

- Routine screening with MRI of the breast, unless patient meets high risk criteria for increased breast cancer surveillance per ACS guidelines
- Routine laboratory tests or imaging, except mammography if indicated for detection of disease recurrence in absence of symptoms

HEALTH PROMOTION

- Assess information needs related to breast cancer and its treatment, side effects, other health concerns and available support services and provide or refer to appropriate resources to meet these needs
- Counsel survivors to achieve and maintain a healthy weight; weight management is considered a priority standard of care
- Counsel survivors to engage in regular physical activity including:
  - Aerobic exercise at least 150 minutes per week
  - Strength training exercise at least 2 days per week
- Counsel survivors to achieve a dietary pattern that is high in vegetables, fruits, whole grains, legumes and low in saturated fats
- Assess for tobacco use and offer and/or refer survivors to cessation counseling and resources and counsel survivors to avoid tobacco products
- Counsel survivors to limit alcohol consumption to no more than 1 drink per day for women

CARE COORDINATION

- Consult with cancer treatment team and request a treatment summary and survivorship care plan
- Maintain communication with the oncology team throughout the patient's diagnosis, treatment and post-treatment care to ensure care is evidence-based and well-coordinated
- Encourage the inclusion of caregivers, spouses or partners in usual breast cancer survivorship care and support

High prevalence ≥50% (H), Mid Prevalence 21-49% (M), Low-Prevalence ≤20% (L), Unknown Prevalence (U)

Note: This guideline is intended for female breast cancer survivors.

View full-text guideline at http://bit.ly/BrCaCare

BREAST CANCER SURVIVORSHIP CARE: LONG-TERM AND LATE EFFECTS SUMMARY

Long-term Effects Start during treatment and persist	**Late Effects** Start after treatment ends
Surgery Effects	
• Lack of skin sensitivity • Body image issues • Sexual dysfunction • Numbness • Pain • Limited range of motion • Weakness • Poor cosmetic outcome	• Lymphedema • Neuropathy
Radiation Therapy to the Breast/Chest Wall/Regional Lymph Nodes Effects	
• Fatigue[a,b] • Skin sensitivity/pain • Sexual dysfunction • Pain • Pneumonitis[a,b] • Poor cosmetic outcome • Breast atrophy/asymmetrical breast volume • Lymphedema[a] • Numbness or weakness of the upper extremity[a]	• Skin discoloration • Breast may be slightly smaller and firmer than the nonirradiated side (breast asymmetry) • Skin sensitivity/pain • Telangiectasia • Sexual dysfunction • Lymphedema[a] • Shortness of breath (lung pneumonitis or fibrosis)[a,b] • Cardiovascular disease (e.g., pericardial effusion, pericarditis)[b] • Numbness or weakness of the upper extremity[b,c] • Second primary cancers (e.g., soft-tissue sarcomas of thorax, shoulder, and pelvis; lung cancer)[a,b]
Chemotherapy Effects	
• Cognitive impairment • Fatigue • Ovarian failure with or without menopausal symptoms • Sexual dysfunction • Change in libido • Infertility • Weight gain • Obesity • Neuropathy, especially after taxanes • Oral health issues • Hair loss	• Osteoporosis/osteopenia • Increased risk of cardiovascular disease (cardiomyopathy, congestive heart failure) with anthracycline-based chemotherapy • Increased risk of leukemia and myelodysplastic syndrome with alkylating agents, anthracyclines, other topoisomerase II inhibitors, and other agents with immunosuppressive potential

[a] Risks are increased in patients who also received radiotherapy to the supraclavicular lymph nodes.
[b] Risks are increased in patients who also received radiotherapy to the internal mammary lymph nodes.
[c] There is a need to be careful, because these can also be signs of recurrent cancer, typically with pain; an appropriate consultation with the radiation oncologist may be warranted.

Note: This guideline is intended for female breast cancer survivors.

Long-term Effects Start during treatment and persist	**Late Effects** Start after treatment ends
Hormonal Therapy Effects	
Tamoxifen • Hot flashes • Changes in menstruation • Mood changes • Increased triglycerides	• Increased risk of stroke • Increased risk of endometrial cancer • Increased risk of blood clots • Osteopenia in premenopausal women
Aromatase Inhibitors • Vaginal dryness • Decreased libido • Musculoskeletal symptoms/pain • Cholesterol elevation	• Increased risk of osteoporosis • Increased risk of fractures
Targeted Therapy Effects	
Trastuzumab • Increased risk of cardiac dysfunction	
General Psychological Long-term and Late Effects	
• Depression • Distress—multifactorial unpleasant experience of psychological, social, and/or spiritual nature • Worry, anxiety • Fear of recurrence • Fear of pain • End-of-life concerns: death and dying • Changes in sexual function and/or desire • Challenges with body image • Challenges with self-image • Relationship and other social role difficulties • Return-to-work concerns and financial challenges	
More Information	
View the American Cancer Society/American Society of Clinical Oncology Breast Cancer Survivorship Care Guideline at: http://bit.ly/BrCaCare	

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BREAST CANCER SURVIVORSHIP CARE GUIDELINE CHECKLIST FOR PROVIDERS

Clinical follow-up care provided to breast cancer survivors should be individualized based on age, specific diagnosis and treatment protocol.

Surveillance

- ☐ Individualize clinical follow-up care provided to breast cancer survivors based on age, specific diagnosis and treatment protocol as recommended by oncology team. Make sure patient receives detailed cancer-related history and physical exam every 3-6 months for first 3 years after primary therapy, every 6-12 months for the next 2 years, and annually thereafter by the treating oncology team.
- ☐ Refer women who received a unilateral mastectomy for annual mammography on the intact breast and those with lumpectomies for annual mammography of both breasts. Routine screening with MRI of the breast is not recommended unless patient meets high risk criteria for increased breast cancer surveillance as per ACS guidelines.
- ☐ Routine laboratory tests or imaging is not recommended, except mammography if indicated, for detection of disease recurrence in absence of symptoms.
- ☐ Educate and counsel women about signs and symptoms of local or regional recurrence.
- ☐ Assess cancer family history. Offer genetic counseling if hereditary risk factors suspected.
- ☐ Counsel patients to adhere to adjuvant endocrine (antiestrogen) therapy.

Screening for Second Primary Cancers

- ☐ Screen for other cancers, as you would the general population. Provide annual gynecologic assessment for postmenopausal women on selective estrogen receptor modulator therapies.

Assessment and Management of Physical and Psychosocial Long-Term and Late Effects

- ☐ Assess for **body image/appearance concerns**. Offer adaptive devices and/or surgery when appropriate. Refer for psychosocial care as indicated.
- ☐ Counsel on how to prevent/reduce risk of **lymphedema**, including weight loss for those who are overweight or obese. Refer patients with clinical symptoms or swelling suggestive of lymphedema to therapist knowledgeable about diagnosis and treatment.
- ☐ Monitor **lipid levels** and provide cardiovascular monitoring, as indicated. Educate on healthy lifestyle modifications, potential cardiac risk factors, and when to report relevant symptoms.
- ☐ Ask patients if they are experiencing **cognitive difficulties**. Assess for reversible contributing factors of cognitive impairment and treat when possible. Refer patients with signs of cognitive impairment for neurocognitive assessment and rehabilitation, including group cognitive training if available.
- ☐ Assess for **distress**, **depression** and/or **anxiety**. Conduct probing assessment for patients at higher risk of depression. Offer in-office counseling, pharmacotherapy and/or refer to appropriate psycho-oncology and mental health resources as clinically indicated.

Note: This guideline is intended for female breast cancer survivors.

- Assess for **fatigue** and treat any causative factors, including **anemia**, **thyroid dysfunction** and **cardiac dysfunction**. Offer treatment or referral for factors that may impact fatigue (e.g., mood disorder, sleep disturbance, pain) for those who do not have an identifiable cause of fatigue. Counsel patients to engage in regular physical activity and refer for cognitive behavioral therapy as appropriate.
- Assess for **musculoskeletal symptoms** by asking about symptoms at each encounter. Offer one or more of the following interventions based on clinical indication: acupuncture, physical activity, referral for physical therapy or rehabilitation.
- Assess for **pain** and contributing factors with simple pain scale and comprehensive history of complaint. Offer interventions for pain such as acetaminophen, non-steroidal anti-inflammatory drugs, physical activity, and/or acupuncture. Refer to appropriate specialist, depending on etiology of pain once underlying etiology has been determined. Assess for **peripheral neuropathy** and contributing factors by asking about symptoms. Offer physical activity for neuropathy. Offer duloxetine for patients with neuropathic pain, numbness and tingling.
- Assess for **sexual dysfunction** or problems with sexual intimacy. Assess for reversible contributing factors and treat when appropriate. Offer nonhormonal, water-based lubricants and moisturizers for vaginal dryness. Refer for psychoeducational support, group therapy, sexual counseling, marital counseling or intensive psychotherapy when appropriate.
- Offer serotonin-norepinephrine reuptake inhibitors (SNRIs), selective serotonin reuptake inhibitors (SSRIs), gabapentin, lifestyle modifications and/or environmental modifications to help mitigate **vasomotor symptoms** or **premature menopausal symptoms**.
- Refer postmenopausal survivors for a baseline dual-energy x-ray absorptiometry (DEXA) scan. Refer for repeat DEXA scans every 2 years for women taking an aromatase inhibitor, premenopausal women taking tamoxifen and/or a gonadotropin-releasing hormone (GnRH) agonist and women who have chemotherapy-induced premature menopause.
- Refer survivors of childbearing age who experience **infertility** to a specialist in reproductive endocrinology and infertility as soon as possible.

Health Promotion

- Assess information needs related to breast cancer and treatment, side effects, other health concerns and available support services. Provide or refer to appropriate resources.
- Counsel to achieve and maintain a healthy weight. Counsel overweight or obese survivors to limit consumption of high-calorie foods and beverages and increase physical activity to promote and maintain weight loss.
- Counsel to engage in regular physical activity consistent with the ACS guideline and specifically: avoid inactivity and return to normal daily activities as soon as possible after diagnosis, aim for at least 150 minutes of moderate or 75 minutes of vigorous aerobic exercise per week and include strength training exercises at least 2 days per week. Strength training should be emphasized for women who are treated with adjuvant chemotherapy or hormone therapy.
- Counsel to achieve a dietary pattern that is high in vegetables, fruits, whole grains and legumes; low in saturated fats; and limited in alcohol consumption.

Note: This guideline is intended for female breast cancer survivors.

- Counsel to avoid smoking. Refer survivors who smoke to cessation counseling and resources.

Care Coordination/Practice Implications

- Consult with cancer treatment team and obtain a treatment summary and survivorship care plan.
- Maintain communication with oncology team throughout diagnosis, treatment and post-treatment to ensure care is evidence-based and well-coordinated.
- Encourage the inclusion of caregivers, spouses or partners in usual breast cancer survivorship care and support.

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