Clinical practice guidelines for the care and treatment of breast cancer: follow-up after treatment for breast cancer (summary of the 2005 update)

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This article provides a summary of the changes along with the updated recommendations (Table 1) made by Health Canada's Steering Committee on Clinical Practice Guidelines for the Care and Treatment of Breast Cancer to the article "Clinical Practice Guidelines for the Care and Treatment of Breast Cancer: 9. Follow-up after treatment for breast cancer," originally published in 1998[1] (the 2005 update, as well as an updated patient guide, can be found online at www.cmaj.ca/cgi/content/full/158/3/DC1).

In the 1998 guideline, it was recommended that all patients who have completed primary treatment for breast cancer should have regular follow-up surveillance consisting of medical history, physical examination and annual mammograms. It was also recommended that the frequency of visits be adjusted according to the individual patient's needs, that patients be encouraged to report new persistent symptoms promptly without waiting for the next scheduled appointment, that the responsibility for follow-up be formally allocated to a single physician and that the patient be fully informed of the arrangements for follow-up. In the 2005 update, the evidence supporting the goals of follow-up and the components of the follow-up program have been updated. After a review of the updated evidence, the steering committee has decided to leave the existing guidelines unchanged and has added recommendations to address special

Table 1: Updated recommendations from the clinical practice guideline for the care and treatment of breast cancer: follow-up after treatment for breast cancer

- All patients with breast cancer should have regular follow-up surveillance.
- The frequency of visits should be adjusted according to individual patient's needs.
- All visits should include a medical history. For women who are taking tamoxifen, it is important to ask about vaginal bleeding. Physical examination should include breasts, regional lymph nodes, chest wall, lungs and abdomen. The arms should be examined for lymphedema. Annual visits should include mammographic examination.
- Routine laboratory and radiographic investigations should not be carried out for the purpose of detecting distant metastases.
- Patients should be encouraged to report new, persistent symptoms promptly, without waiting for the next scheduled appointment.
- If a woman wishes to carry out breast self-examination, it is reasonable to teach her the proper procedure.
- Psychosocial support should be encouraged and facilitated.
- Participation in clinical trials should be encouraged and facilitated.
- The responsibility for follow-up should be formally allocated to a single physician.
- Communication between all members of the team must be ensured to avoid duplication of visits and tests.

Cognitive functioning

- There may be an effect of chemotherapy on cognitive functioning, which may be sustained. However, there is no correlation between subjective complaints of cognitive impairment and objective measures.
- Prospective longitudinal controlled studies should be encouraged.

Fatigue

- Fatigue may affect approximately one-quarter to one-third of breast cancer survivors. Patients should be asked about symptoms of fatigue.
- Physiologic causes of fatigue should be investigated and ruled out. Depression and pain are potentially treatable underlying factors.
- Prospective longitudinal controlled studies should be encouraged.

Weight management

- Weight management should be discussed with all breast cancer survivors.
- Overweight patients should be encouraged to participate in evidence-based weight-management programs.

Osteoporosis

- Patients who are postmenopausal, or are premenopausal with risk factors for osteoporosis, or are taking aromatase inhibitors should undergo a screening bone mineral density test.
- Patients should be counselled on exercise and on adequate intake of calcium and vitamin D.
- Osteoporosis treatment should include a bisphosphonate.

Sexual functioning

- Sexual functioning should be discussed with women at follow-up visits.

Pregnancy

- Women considering pregnancy following a diagnosis of breast cancer should be informed of the limited data on the effect of pregnancy on outcomes such as breast cancer recurrence and survival. Most of the studies have been retrospective case series or case–control studies with small numbers of patients. Nevertheless, there is currently no evidence that subsequent pregnancy adversely affects survival.

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topics of concern to breast cancer survivors. These topics are cognitive functioning, fatigue, weight management, osteoporosis, sexual functioning and pregnancy.

There is a growing body of observational studies pointing to an effect of chemotherapy on cognitive functioning, but because of the limited strength of the evidence, the steering committee feels that it is premature to recommend routine neuropsychological testing or interventions. Further research is required. Similarly, although fatigue is experienced by many breast cancer survivors, the mechanism of fatigue and the relation between fatigue and primary treatment remain unclear despite current evidence.

Weight gain is a common problem for breast cancer survivors. Weight gain has been associated with receipt of adjuvant chemotherapy but not with tamoxifen therapy. In a systematic review of the relation between obesity at diagnosis and breast cancer outcomes, 26 of 34 studies identified showed a statistically significant association between obesity and breast cancer recurrence or survival, whereas 8 studies found no such associations.[2] The National Surgical Adjuvant Breast and Bowel Project (NSABP) analyzed their trials of adjuvant therapy and found that breast cancer recurrence among obese women was the same as that among underweight and normal-weight women.[3] Thus, although there is some evidence of a positive relation between weight management and breast cancer outcomes, there is no definitive evidence that losing weight after diagnosis influences breast cancer outcomes. Given the positive effect of weight management on other important comorbid conditions that can affect breast cancer survivors, however, a discussion with overweight patients about weight management and effective weight-management measures is recommended.

Women with a history of breast cancer may be at increased risk of osteoporosis because of loss of bone mineral density owing to premature ovarian failure from chemotherapy[4] or to aromatase inhibitors used as adjuvant therapy.[5,6] For this reason, the steering committee recommends that osteoporosis be monitored in postmenopausal women with breast cancer, especially those who have chemotherapy-induced early menopause or are taking aromatase inhibitors. Such women should have a baseline bone mineral density test and be monitored for the development of osteoporosis.

Difficulties with sexual functioning have been commonly reported in women with breast cancer. However, most studies have found that sexual functioning of breast cancer survivors is similar to that of healthy women without breast cancer.[7] Although the type of primary breast cancer surgery may have an impact on body image, sexual functioning is not adversely affected. With respect to adjuvant systemic therapy, the highest incidence of sexual dysfunction has been reported among women who received chemotherapy. Studies have not shown that tamoxifen has an effect on sexual functioning.[7]

The issue of subsequent pregnancy after a diagnosis of breast cancer is important for patients of child-bearing age. The concern has been that high levels of estrogen associated with pregnancy might stimulate dormant micrometastases. A number of case series and case–control studies have been published, all of which had methodological limitations. Although most showed that subsequent pregnancy in breast cancer survivors does not adversely affect survival, their methodological limitations must be kept in mind.

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The Steering Committee on Clinical Practice Guidelines for the Care and Treatment of Breast Cancer is part of Health Canada's Canadian Breast Cancer Initiative. A list of members appears in the updated guideline (available at www.cmaj.ca/cgi/content/full/158/3/DC1).

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