Insitu Breast Carcinoma

Ductal carcinoma in situ (DCIS) is a proliferation of "malignant appearing" cells of the ducts and terminal lobule units of the breast. Its presence predisposes women to an increased risk of invasive cancer.

Presently, it is unclear whether or not testing for estrogen and progesterone receptors should be performed routinely on DCIS/LCIS (lobular carcinoma in situ) specimens. The group recommended that testing should not be performed on LCIS, since 99% are known to be estrogen and progesterone receptor positive (26,38). Currently, testing for hormone receptor status on DCIS/LCIS specimens is not standard practice in most centers across the country, and there is no evidence to suggest that knowing this result will affect the outcome. Therefore, the group has decided to **not** recommend carrying out routine receptor testing on DCIS. However, if an individual physician requests it, the pathology department will provide testing on a case-by-case basis following referral.

Patients are assessed for candidacy for hormone manipulation either by medical oncology, or occasionally by radiation oncology, during the consultation regarding breast irradiation.

RECOMMENDATION

All patients deemed to be candidates for treatment for DCIS/LCIS will be offered tamoxifen 20mg/daily, taken orally, for five consecutive years. See guideline for insitu breast carcinoma, Eastern Health.

The potential benefit of using tamoxifen for insitu breast carcinoma would be primarily to help reduce the risk of developing invasive breast cancer. Tamoxifen may also have favorable effects on blood lipids and bone density. The risks, though relatively small, include development of endometrial cancers, thromboembolic events and cataract formation, while unpleasant side effects such as a notable increase in hot flashes are known to influence quality of life.

The oncologist will determine whether the patient will require followup in the cancer centre, or be followed by their family physician or referring physician.

Clinical Practice Guideline for the Hormonal Therapy of Insitu Breast Carcinoma

Eastern Health Breast Cancer Disease Site Group

Question:

What is the role of tamoxifen in the management of DCIS (Ductal Carcinoma Insitu/LCIS (Lobular Carcinoma Insitu)?

Target Population:

These recommendations apply to patients with DCIS or LCIS.

Recommendations and Supporting Evidence:

The oncologist will discuss the treatment option of tamoxifen 20mg/daily, taken orally, for five years as per the NSABP B-24 clinical trial (8), with those patients deemed to be candidates. NSABP B-24 found that tamoxifen reduced the risk of both ipsilateral and contralateral breast cancer. This guideline has also been adapted from the Cancer Care Ontario 'management of ductal carcinoma in situ (DCIS) (2001 update) (39).

Patients with high grade DCIS, regardless of age should be considered for tamoxifen. Patients, including those less than 50 years of age, with low or moderate grade disease, may also be considered. Patients who have undergone bilateral mastectomies, do not require tamoxifen. Those who have undergone a unilateral mastectomy may derive a small benefit for the remaining breast.

In all cases, a discussion with the patient should include the potential risks, though small, of thromboembolic events and endometrial carcinoma, associated with tamoxifen versus their individual benefit.

Guideline Development Process

The target users are of this guideline would be family physicians, other specialists, and other health care professionals.

The Eastern Health Breast Cancer Disease Site Group is a collaboration of professionals of all areas of health care, involved in the screening, diagnosis, and management of breast disease, in the province of Newfoundland and Labrador. These professionals include members of the provincial breast screening program, genetics program, radiologists, pathologists, surgical oncologist, medical oncologists, radiation oncologists, pharmacists, nurses, social workers, palliative care physicians and members of administration.

Due to rather limited resources, team leaders were designated for each discipline from the existing members of the Eastern Health Breast Cancer Disease Site Group. Literature searches were carried out by the Guidelines Coordinator and reviewed by the team leader, with which recommendations were then formulated, with input from all involved parties.

Literature searches were conducted in Pubmed, CINAHL, and the Cochrane Library and using keywords “ductal carcinoma insitu,” and “lobular carcinoma insitu”. All selected literature articles were in English and dated after the year 2000, unless the selection was a landmark study and would then be included.

Once the draft guideline has been developed, it is reviewed at the monthly meeting of the group. Feedback is welcomed, any revisions are carried out and consensus, where possible, is reached. The guideline is then circulated to select target users for feedback, and revisions made accordingly. The guideline is then presented to the administrative body for approval. Upon approval, it will be distributed to appropriate health care providers in the province.

This guideline will be reviewed and/or updated every 3-5 years, unless new research requires an earlier review.

These guidelines are a statement of consensus of NL Breast Disease Site Group regarding their views of currently accepted approaches to diagnosis and treatment. Any clinician seeking to apply or consult the guidelines is expected to use independent medical judgement in the context of individual clinical circumstances to determine any patient's care or treatment.

LITERATURE SUPPORT FOR HORMONAL THERAPY OF INSITU BREAST CANCER

1. Fisher B, Dignam J, et al. Tamoxifen in treatment of intraductal breast cancer: National Surgical Adjuvant Breast and Bowel Project B-24 randomised controlled trial. The Lancet. 1999;353:1993-2000.

2. Middleton LP, Perkins GH, et al. Expression of ERα and ERβ in lobular carcinoma in situ. Histopathology. 2007;50:875-880.

3. Cancer Care Ontario. Management of ductal carcinoma in situ of the breast: a clinical practice guideline. September 2006. www.cancercare.on.ca

4. British Columbia Cancer Agency. In situ disease. Cancer Management Guidelines. November 2004. www.bccancer.bc.ca

5. Olivotto IA, Levine M, for the Steering Committee on Clinical Practice Guidelines for the Care and Treatment of Breast Cancer: management of ductal carcinoma in situ (DCIS)(2001 update). CMAJ 1998(suppl.):1-25.