Treatment patterns of low-risk, post-menopausal breast cancer patients

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Background

Data from a single trial inform the recommendations from Society of Surgical Oncology (SSO)/Choosing Wisely Campaign (CWC) and Cancer and Leukemia Group B (CALGB) to forego sentinel lymph node biopsy, and to consider the omission of radiation therapy, respectively, for low risk breast cancer patients. Despite these recommendations, many patients are over-treated. This study evaluates patients over age seventy with stage I, ER positive, HER-2 negative breast cancer in order to define changes in treatment patterns since publication of SSO/CWC and CALGB guidelines.

Methods

We performed a retrospective cross-sectional analysis of 376 consecutively treated patients in 2016 over the age of seventy with stage I, ER positive, HER-2 negative breast cancer at KNC as part of a quality improvement project. In order to characterize practice patterns, patients were stratified by treatment type, including type of surgery, radiation therapy, hormone therapy, or absence of treatment.

“Low Risk” =
- > 70 years old (post-menopausal)
- Stage I
- ER positive
- HER-2 negative

Consider…
Treating with lumpectomy and endocrine therapy only

Results

Two-hundred eighty patients in total underwent sentinel node biopsy (74%), of which 235 also received endocrine therapy. One-hundred sixty-nine patients (45%) underwent radiation therapy in conjunction with lumpectomy, of which fifteen (4.0%) also received endocrine therapy. Sixty-four patients (17%) underwent mastectomy. Among those who underwent mastectomy, 53 received endocrine therapy, and 52 underwent sentinel node biopsy. Three-hundred forty-six patients (92%) received endocrine therapy. Eighteen patients out of 376 (4.8%) declined surgery, of which fourteen (3.7%) underwent endocrine therapy only, and four (1.1%) declined all treatment. Fifteen patients (4.0%) were treated with lumpectomy and endocrine therapy only.

Conclusion

A majority of low-risk, post-menopausal patients with stage I breast cancer treated at KNC are over-treated according to treatment guidelines from SSO/CWC, and data published by CALGB. There is limited financial incentive to encourage unnecessary therapeutic intervention within an HMO structure, such as that found within KNC. Factors driving overtreatment may be patient or physician preference, rather than financial, and require further study.