Study: Many patients with early-stage breast cancer receive costly, inappropriate testing

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Study co-author Dr. Gary Lyman says: "For many women with early-stage breast cancer, advanced imaging and serial tumor markers add cost but not value. In some cases, they can even lead to unnecessary invasive procedures, excessive radiation exposure, misdiagnosis and even overtreatment." Dr. Lyman is a breast cancer oncologist, health economist and co-director of the Hutchinson Institute for Cancer Outcomes Research, or HICOR. Credit: Bo Jungmayer/Fred Hutch News Service

A study from Fred Hutchinson Cancer Research Center that will be presented at the American Society of Clinical Oncology annual meeting on June 5 in Chicago shows that asymptomatic women who have been treated for early-stage breast cancer often undergo advanced imaging and other tests that provide little if any medical benefit, could have harmful effects and may increase their financial burden.

"Although ASCO Choosing Wisely guidelines recommend against routine surveillance testing, including advanced imaging for asymptomatic individuals with early-stage breast cancer who have undergone treatment, these costly procedures are frequently performed," said Dr. Gary Lyman, a breast cancer oncologist, health economist and co-director of the Hutchinson Institute for Cancer Outcomes Research, or HICOR, who was a study leader.

In guidelines designed to help patients and their oncologists make good treatment decisions based on medical evidence, ASCO recommends against the routine use of advanced imaging scans and costly blood tests to track tumor markers. The reason: Several studies have shown there is no benefit for these patients, and false-positive results can lead to unnecessary procedures, unneeded radiation exposure, misdiagnosis and possible overtreatment.

But the researchers' review of records of 2,193 early-stage breast cancer patients found that 37 percent received tumor-marker tests during the post-treatment surveillance period, averaging 2.8 tests per patient, and 17 percent received advanced imaging, averaging 1.5 images per patient. Lyman said costs for patients undergoing these advanced procedures were considerably higher than the average $18,403 during the surveillance period. The June 5 presentation will feature updated data.

"During early surveillance following treatment, patients averaged 13.3 physician visits, primarily with oncologists and primary care providers. We believe one of the best ways we can help patients reduce their financial burden is for us to reinforce the message with oncologists that these tests have been shown to provide no benefit for this particular group of patients," said Lyman, whose research has helped formulate these and other evidence-based guidelines.

He will present the findings in a poster presentation , "Patterns in provider types and cost of surveillance testing in early-stage breast cancer patients: a regional study," developed with contributions from the HICOR team, including

Catherine Fedorenko, Julia Rose Walker and Karma Kreizenbeck, as well as the HICOR Working Group on Breast Cancer Surveillance, which continues to review and promote further research in this area.

The study linked cancer registry patient records in western Washington with claims from the commercial insurers Premera and Regence.

Provided by Fred Hutchinson Cancer Research Center