Patients who received PBI without chemotherapy experienced less fatigue, slightly poorer cosmesis

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Patient-reported outcome (PRO) data indicates that partial breast irradiation (PBI) is more convenient than whole breast irradiation (WBI) for women with breast cancer who do not receive adjuvant chemotherapy. These participants on the NRG Oncology clinical trial NSABP B-39/RTOG 0413 also experienced less post-treatment fatigue and slightly poorer cosmesis at 36 months following treatment, whereas cosmesis was equivalent at 36 months in women who received chemotherapy and PBI or WBI. These outcomes were presented at the American Society of Clinical Oncology (ASCO) Annual Meeting and the abstract was designated as a "Best of ASCO" abstract.

In December 2018, NRG Oncology presented the results of NSABP B-39/RTOG 0413 comparing PBI and WBI after lumpectomy in women with breast cancer at the San Antonio Breast Cancer Symposium (SABCS). Although these 10-year results did not show equivalence of PBI to WBI in controlling ipsilateral breast tumor recurrence in this patient population due to clinically small differences, data suggested that PBI could still be considered an acceptable alternative to WBI for certain women. This trial included a prospective substudy for PROs that evaluated breast cancer treatment outcomes including cosmesis, function, and pain, as well as fatigue, and is the subject of the current ASCO presentation.

"While PBI recurrence outcomes were statistically inferior to WBI on the NRG Oncology NSABP B-39/RTOG 0413 trial, it is still crucial that we measure how PBI compares to WBI in terms of quality of life (QOL) for women. As there were only slight clinical outcome differences between these two treatments, some women could still derive benefit from PBI treatment in terms of outcomes such as cosmesis or fatigue," stated Patricia Ganz, MD, Director of Cancer Prevention and Control Research at the University of California, Los Angeles Jonsson Comprehensive Cancer Center and lead author of the NRG Oncology NSABP B-39/RTOG 0413 abstract.

950 patients enrolled in the QOL substudy for NRG Oncology NSABP B-39/RTOG 0413 had follow up data and, of these patients, 446 received chemotherapy, while 504 did not receive chemotherapy. In non-chemotherapy patients, PBI did not meet the criteria for cosmesis equivalence, but caused less fatigue and was rated more convenient than WBI. In patients who received chemotherapy, PBI participants reported equivalent cosmesis to WBI. In both treatment groups, PBI patients reported less pain at the end of treatment, and treatment related symptoms were worse with WBI.

More information: Ganz PA, Cecchini RS, White JR, Vicini F, Julian TB, Arthur DW, Rabinovitch R, Kuske RR, Parda DS, Scheier M, Winter KA, Paik S, Kuerer M, Vallow L, Pierce LJ Mamounas EP, Costantino JP, McCormick B, Curran, Jr. WJ, Wolmark N. Patient-reported outcomes (PROs) in NRG oncology/NSABP B-39/RTOG 0413: A randomized phase III study of conventional whole breast irradiation (WBI) versus partial breast irradiation (PBI) in stage 0, I, or II breast cancer. Abstract presented at the annual meeting of the American Society of Clinical Oncology (ASCO). Chicago, IL.

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