

## Mastectomies May Not Improve Survival in Younger Women with Breast Cancer

By Carly King, M.S., PA-C

When faced with a diagnosis of breast cancer, a major focus of the treatment discussion is on surgery options. In particular, the question of whether to surgically remove the cancerous tissue by lumpectomy (removing just the affected tissue and leaving as much breast tissue as possible), partial or segmental mastectomy (removing a larger area of breast tissue along with the affected tissue), or total mastectomy (removing all breast tissue) is sometimes a difficult and overwhelming decision. There have been studies showing that when comparing different surgical options, survival outcomes for women over 50 years old are no different. However, not as much research has been done on surgical outcomes for younger women with breast cancer. In some cases, it has been suggested that younger women should be treated with more aggressive surgery, but physicians and researchers at Levine Cancer Institute in Charlotte, NC have been investigating whether more aggressive surgery is really necessary.

Breast surgeons Lejla Hadzikadic-Gusic, M.D., and Christine Pestana, M.D., are leading authors on a recently completed study that retrospectively analyzed the outcomes of 591 women under the age of 40 with invasive breast cancer that were treated at their institution between the years 2010 and 2019. A retrospective study means that they looked back at clinical cases that have already happened, rather than starting a new study and enrolling patients to different treatment groups prospectively. The median time that they were able to follow patients was 67 months, and the median age of all patients was 37 years old. Patients with stage IV disease, DCIS, and men were excluded.



650-326-6686

- info@bayareacancer.org
- @bayareacancer

The study specifically compared survival between patients who had mastectomies versus patients who had breast-conserving treatment, which generally includes lumpectomy followed by radiation. The results showed that treatment with a mastectomy had no impact on survival when compared to breast conserving treatment. More specifically, it means mastectomies did not increase or decrease survival rates in the population studied. Of note, the survival outcomes of this study depend on a woman adhering to regular post-surgery surveillance and treatment of any new tumors.

These results are meaningful because they affirm that breast conserving treatment is an equivalent option to mastectomy for younger women with breast cancer. There is an anecdotal phenomenon known as the "Angelina Jolie Effect" where women with cancer diagnosed in one breast are opting to have total prophylactic mastectomies of the unaffected breast. In some cases, if a person is particularly high-risk due a genetic predisposition, like Angelina Jolie has, this may be appropriate. But in other cases when a person is "average-risk", this may be overtreating the disease. It has been shown that mastectomies generally require longer recovery times and have higher surgical complication rates than lumpectomies. Additionally, recent research reports that women who undergo breast conserving treatment have higher psychosocial and sexual well-being in the years after surgery, compared to women who had mastectomies. This new data will hopefully help young women make informed decisions about surgery that could minimize overly aggressive treatment.

The strengths of this study include its large population size and long follow-up period. Some of the limitations are that all patients were treated at one institution, and we do not know the factors that went into the surgical decisions since they reviewed the data retrospectively. The formal publication of these data has not yet been released, so the results that are currently available are from Dr. Pestana's presentation at the American Society of Breast Surgeons Annual Meeting in Las Vegas in April 2022. Dr. Pestana was awarded "Best Presentation by a Resident/Fellow" at the annual conference. References:

Charlotte Media Group. "Atrium Health Levine Cancer Institute Reveals Results of Surgical Treatment of Breast Cancer Study." https://www.thecharlotteweekly.com/southcltweekly/atrium-health-levine-can cer-institute-reveals-results-of-surgical-treatment-of-breast-cancer-study/arti cle\_cf2f3028-bf4b-11ec-86cc-1fe1a5a3b668.html.

Medscape. "Mastectomy May Not Be Necessary for Young Breast Cancer Patients." http://www.medscape.com/viewarticle/974134.

"Surgical Approach and Overall Survival in Younger Women With Breast Cancer - The ASCO Post." Accessed June 2, 2022. https://ascopost.com/issues/may-25-2022/surgical-approach-and-overall-surviv al-in-younger-women-with-breast-cancer/.

Hanson, Summer E., Xiudong Lei, Margaret S. Roubaud, Sarah M. DeSnyder, Abigail S. Caudle, Simona F. Shaitelman, Karen E. Hoffman, et al. "Long-Term Quality of Life in Patients With Breast Cancer After Breast Conservation vs Mastectomy and Reconstruction." JAMA Surgery, April 13, 2022, e220631. https://doi.org/10.1001/jamasurg.2022.0631.



650-326-6686

