

# Earlier and More Comprehensive Breast Cancer Screening for Transgender Women

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## Background

The University of California's "Guidelines for the Primary and Gender-Affirming Care of Transgender and Gender Nonbinary People" recommend screening mammograms for transgender women every two years starting at the age of 50 if the patient has been on gender-affirming hormone therapy (GAHT) for at least five years<sup>1</sup>. However, the American Cancer Association recommends cisgender women begin mammogram screenings at the age of 40<sup>2</sup>. While the connection between breast cancer and GAHT in transgender women is poorly understood, the potentially increased risk of breast cancer has been suspected because of the increased rates of breast cancer documented in postmenopausal women on estrogen replacement therapy<sup>3,4</sup>. This suspicion has also grown due to the increased rates of reported breast cancer in transgender women. The disparity in screening guidelines between transgender and cisgender women may be putting transgender women at risk for lower detection rates of breast cancer and potentially delayed treatment. Until the relationship between GAHT in transgender women is delineated, earlier and more comprehensive breast screening exams that are similar to cisgender women would be beneficial.

## Hypothesis

The aim of this study was to review the medical literature regarding presentation, current screening guidelines, and imaging modalities of breast cancer in transgender women.

## Methods

A keyword search of medical literature using the search terms "breast imaging", "breast cancer", and "transgender patients" was performed. Relevant articles were reviewed and studies that evaluated the presentation of breast development, breast cancer, or imaging modalities between cisgender and transgender women were included.

## Results

We found sufficient clinical evidence supporting the need for earlier and more comprehensive breast cancer screening in transgender women. The included studies from the literature search demonstrated:

- The need for earlier breast cancer screening in transgender women
  - Younger median age of breast cancer diagnosis (52 versus 61)<sup>3</sup>
  - Comparable breast tissue development and benign versus malignant biopsy ratio between transgender women on GAHT and cisgender women<sup>5</sup>
- Incorporation of ultrasound for more comprehensive breast cancer screening in transgender women
  - Significantly smaller portion of diagnosis via mammography seen in transgender women compared to cisgender<sup>6</sup>
  - The dense breast tissue associated with transgender women on estrogen therapy contributes to an increased risk of false positive and false negative mammogram findings<sup>7,8</sup>
  - Technically feasible to include ultrasound as part of the screening to detect nonpalpable or obscured lesions<sup>9</sup>
  - Relative painlessness of both modalities increases the likelihood of continuous screenings<sup>9</sup>

## Conclusion

The current findings suggest that the presentation of breast cancer in transgender women may be similar to cisgender women and can present at an earlier age. A need for more comprehensive screening with ultrasound and the practicality of this incorporation was also indicated. The adoption of earlier and more comprehensive breast cancer screenings for transgender women may provide earlier and more accurate diagnoses of breast cancer, thus improving health outcomes.

## References

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