

Canadian Society of Breast Imaging Position Statement on Breast Arterial Calcification Reporting on Mammography

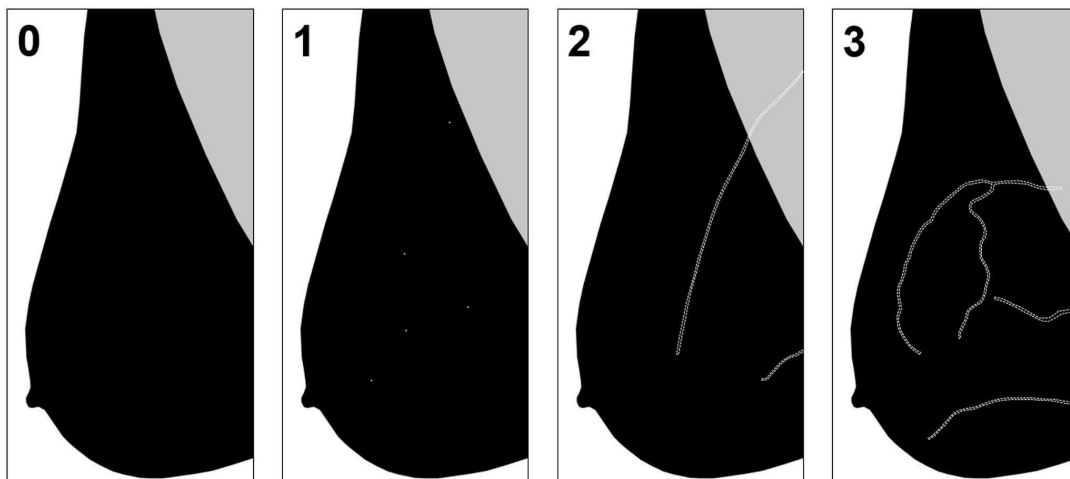
Although cardiovascular disease is the leading cause of premature death in Canadian women, ¹ most women are unaware of their personal cardiovascular risk status.² Breast arterial calcification (BAC) has been identified as an independent cardiovascular risk factor ³⁻⁸ and is strongly correlated with cardiovascular risk.⁹

BAC is often seen on mammography (12-42.5% of women undergoing screening mammography) ⁴⁻¹⁰ but is not routinely documented in the mammography report. The reporting of BAC on screening and diagnostic mammography could be as valuable for cardiovascular risk stratification as coronary arterial calcium (CAC) score on computed tomography (CT).¹¹⁻¹² Detection of BAC on mammography could allow intervention in asymptomatic women at higher cardiovascular risk.^{3,13}

Canadian radiologists do not routinely report BAC on mammography. Our cardiac colleagues have noted a discrepancy in reporting of BAC in Canada compared to other countries.^{9,14} Reporting breast arterial calcification is an opportunity to improve awareness of a woman's cardiovascular risk status.¹⁵

The Canadian Society of Breast Imaging (CSBI) proposes using the following grading system for BAC:

Grading of Breast Arterial Calcifications: ¹⁶



Grade 0: No vascular calcification

Grade 1: Few punctate vascular calcifications without coarse, tram-track, or ring calcifications

Grade 2: Coarse vascular calcification or tram-track calcification in fewer than 3 vessels

Grade 3: Severe coarse vascular or tram track calcification affecting 3 or more vessels

When mammography identifies grade 3 BAC, CSBI proposes including the following script in the mammogram report. Reporting lower grades in patients under 55y could be considered.

There are severe coarse vascular or tram track calcifications affecting 3 or more vessels in the breasts (Grade 3). A strong association between breast arterial calcifications and cardiovascular disease has been identified in multiple studies. Consider correlation with cardiovascular risk factors as clinically indicated.

References

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