

Trends in diagnostic confirmation and treatment of pre-malignant abnormalities at screening mammography

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The detection of breast cancer has come a long way since the days all patients presented with palpable masses. The introduction of mammography and its widespread use as a screening tool has resulted in the detection of asymptomatic, nonpalpable disease. Detection of breast abnormalities at an earlier stage contributes favorably to the prognosis of breast cancer. This thesis provides additional evidence for the beneficial effect of screening mammography programs. Our findings suggest that screening reduces the incidence of high grade invasive carcinoma through early diagnosis and treatment of high grade DCIS.

On the other side, improved digital screening techniques and reading strategies have also resulted in an increased detection of DCIS and other pre-malignant abnormalities. A part of these pre-malignant abnormalities remain subclinical during a woman's lifetime. Their detection may therefore lead to overdiagnosis and subsequent overtreatment, which are an unintended but unavoidable harm of screening mammography. This thesis also addresses trends in recall of mammographic abnormalities that may represent pre-malignant breast disease and the diagnostic workup of these recalls over time.



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