SSQ01-01

Scientific Papers

The Potential Impact of Risk-based Screening Mammography in Women Age 40-49 Years

Thursday, 10:30-10:40 AM
Location: E450A

PARTICIPANTS:

Elissa R Price MD (Presenter): Nothing to Disclose
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CITE THIS ABSTRACT

PURPOSE

To determine the prevalence of very strong family history and extremely dense tissue in women aged 40-49 with breast cancer detected on screening mammography.

METHOD AND MATERIALS

All cancers detected by screening mammography at our institution between 1/1997 and 11/2012 in 40-49 year old women were retrospectively identified. Symptomatic patients undergoing diagnostic mammography and those with a personal history of breast cancer were excluded. Family history, breast density, type of malignancy, tumor receptor status and lymph node status were recorded.

RESULTS

During the study period, 194 cases of breast cancer were identified on screening mammography in 40-49 year old women; 53% invasive cancer and 47% ductal carcinoma in situ. Of the patients with invasive disease, 23% had axillary nodal involvement. A very strong family history was absent in 90%, and extremely dense breast tissue was absent in 86%. 78% patients had neither very strong family history nor extremely dense breasts, including 79% of the cases of invasive disease, of which 24% had axillary nodal involvement and 88% had positive hormone receptor status.

CONCLUSION

Very strong family history and extremely dense breast tissue were commonly absent in 40-49 year old women with breast cancer detected at screening mammography. Reducing the number of women to be screened in this age group by using a risk-based approach would reduce the number of screen-detected cancers by more than 75%, thereby forgoing most of the benefit of mortality reduction that already has been proven for screening women age 40-49 years.

CLINICAL RELEVANCE/APPLICATION

Using a risk-based approach to screening mammography (limiting screening to women with either very strong family history or extremely dense breasts) would reduce by more than 75% the number of screen-detected cancers, thereby forgoing most of the benefit of mortality reduction that already has been proven for screening women age 40-49.