

40歳台の女性においてリスクに基づいたスクリーニングでは乳がんを見逃す(Abstract SSQ01-01)

家族歴や乳房濃度に基づいたリスクベースのスクリーニングマンモグラフィーでは40歳台の女性における浸潤性がんのかなりの数を見逃す

Risk-based screening mammography based on family history and breast density misses a significant number of invasive cancers in women in their 40s

スクリーニングマンモグラフィーを用いて検出された乳がんのスタディの結果、濃厚な家族歴および高濃度乳腺組織は乳がんと診断された40～49歳の女性においては一般的に見られないことが明らかになった。と2014年Radiological Society of North America年次集会で発表された。この後ろ向きスタディには、スクリーニングマンモグラフィーで乳がんを検出された女性136人(40～49歳)が含まれた。患者の家族歴、乳腺濃度、悪性腫瘍の型、リンパ節転移の有無、および受容体の状態が記録された。検出された乳がん136例中、50%が浸潤性と診断され50%は非浸潤性乳管がん(DCIS)と診断されたが、DCIS症例の88%は中悪性度から高悪性度であった。90%の患者において濃厚な家族歴はなく、極端な高濃度乳腺は86%において見られなかった。浸潤性がん症例の79%を含め、78%の患者が濃厚な家族歴も極端な高濃度乳腺も有していなかった。これらの結果から、スクリーニングマンモグラフィーにリスクベースの方法のみを用いると、40歳台の女性において75%を超える乳がんが見逃される可能性のあることが示された。

Full Text

A study of breast cancers detected with screening mammography found that strong family history and dense breast tissue were commonly absent in women between the ages of 40 and 49 diagnosed with breast cancer. Results of the study were presented today at the 2014 annual meeting of the Radiological Society of North America (RSNA).

"Screening recommendations for this age group continue to be debated," said Bonnie N. Joe, M.D., Ph.D., associate professor in residence and chief of women's imaging at University of California, San Francisco (UCSF). "Recent publications have suggested risk-based screening based on family history and breast density. However, our study shows that this approach would miss a significant percentage of invasive cancers and could potentially be dangerous."

The retrospective study, conducted at UCSF, included 136 women between the ages of 40 and 49 with breast cancer identified by screening mammography between 1997 and 2012. Symptomatic patients undergoing diagnostic mammography and those with a personal history of breast cancer were excluded from the study. Patient family history, breast density, type of malignancy, lymph node status, and tumor receptor status were recorded.

"Notably, we found that almost 90 percent of the invasive cancers we would have missed using risk-based triage had positive receptor status, meaning they were very treatable and worth finding early," Dr. Joe said.

Of the 136 breast cancer cases identified, 50 percent were diagnosed as invasive, and 50 percent were diagnosed as ductal carcinoma in situ (DCIS), an early noninvasive form of breast cancer, although 88 percent of DCIS cases were intermediate or high grade.

A very strong family history was absent in 90 percent of patients, and extremely dense breast tissue was absent in 86 percent. Seventy-eight percent of patients had neither strong family history nor extremely dense breasts, including 79 percent of the cases of invasive disease.

"Our results show that by exclusively using a risk-based approach to screening mammography, we could potentially miss more than 75 percent of breast cancers in women in their 40s, thereby eliminating most of the survival benefit from screening mammography that has been previously shown in randomized controlled trials," Dr. Joe said.

Dr. Joe urges proponents of risk-based screening to continue research to find more effective means of risk-based triage. "Neither family history nor breast density in combination or alone are sufficient risk factors to safely triage patients in risk-based screening," she explained.

Routine annual screening mammography has traditionally been recommended by organizations such as the American Cancer Society (ACS) and the American Medical Association (AMA) for all women beginning at age 40. In 2009, the United States Preventive Services Task Force (USPSTF) issued controversial new guidelines recommending screening with mammography every two years beginning at age 50.

"Based on our current knowledge and evidence shown in previous trials, it is still safest to get annual mammograms starting at age 40 in order to maximize the survival benefit of screening mammography," Dr. Joe said.

Co-authors on the study are Elissa R. Price, M.D., Alexander W. Keedy, M.D., Rita Gidwaney, M.D., and Edward A. Sickles, M.D.

RSNA2014 特集

Cardiology

軽症の冠動脈疾患であっても糖尿病患者では高リスクとなる

Oncology

新たな装置によりマンモグラフィーの不快感が緩和する可能性がある

3Dマンモグラフィーは高濃度乳腺におけるがん検出率を向上させる

40歳台の女性においてリスクに基づいたスクリーニングでは乳がんを見逃す

Psychiatry

無症状の動脈硬化は認知機能障害と関連がある

早期アルツハイマーにおいて脳結合の破壊が画像検査により示される

PTSDの兵役経験者においてPET/CTにより脳下垂体異常が示された

Other

半月板の手術は膝関節に対し有害な可能性がある