

Health Imaging (2013 年 12 月 4 日 : Anna Steere)

<抄訳>

米シカゴー 12 月 3 日、RSNA で発表された研究によると、乳腺濃度の測定は、若い女性における乳がんの予測に有効であり、また、乳がんリスクと加齢に伴う乳腺濃度の変化との関係性も明らかになった。

同研究の筆頭著者である Perry 氏 (London Breast Institute) によると、高濃度乳腺は重要な乳がんのリスクファクターであり、また、高濃度乳腺の読影は困難で、診断精度が低い傾向にあるという。

RSNA の記者会見で Perry 氏は、“我々の研究目的は、年齢別の高濃度乳腺における乳がんリスクの評価、および健常者と乳がん患者の年齢別の乳腺濃度パターンの違いを特定することだ” と述べた。

彼らは、若い女性と高齢の女性の乳腺濃度と乳がんリスクを比較した。さらに、加齢による乳腺濃度の変化とリスクの関係性についても分析した。デジタルマンモグラフィーを受診した乳がん患者 282 名と健常者 317 名を対象に行い、それぞれ別々に乳腺濃度を測定した。

50 歳までは、乳がん患者の乳腺濃度は健常者よりも高い結果となった。健常者においては、加齢に伴う乳腺濃度の低下パターンが直線であるのに対し、乳がん患者は曲線を示した。

“乳がん患者においては、非常にばらつきがあり、健常者との違いは歴然である” と Perry 氏は言及した。

乳腺濃度による乳がんリスクは、若い女性に影響が大きいと見られる。

“乳がんによる死の 40% は、診断時に年齢が 50 歳以下でスクリーニングを受けていない女性である。そのような場合のがんは、進行が早く治療が難しいケースが多く再発率も高い” と Perry 氏は述べた。

この研究は、35 歳~40 歳の間に乳腺濃度を測るなど、若い女性における新たな乳がんの予防対策につながるかもしれない、と Perry 氏は述べた。

【原文】

CHIICAGO— Automated volumetric breast density measurement is predictive of breast cancer in young women and the risk of breast cancer may be related to an altered pattern of breast density regression with age, according to research presented Dec. 3 at the annual meeting of the Radiological Society of North America (RSNA).

Dense breast tissue is a significant risk factor for breast cancer and reduces the accuracy of image interpretation, as radiologists tend to overestimate density, according to senior author Nicholas M. Perry, MBBS, FRCS, FRCR, of the London Breast Institute.

“The aims of our study were to assess the risk of breast cancer associated with dense breasts according to age, to compare the predictive accuracy between automated and radiologists’ breast density, and to identify differences in age density pattern between women with and without breast cancer,” said Perry in a press conference at RSNA.

Perry and colleagues created a study in which the breast density and cancer risk between younger and older women were compared. They also analyzed how the risk relates to changes in breast density over time. The study population included 282 breast cancer cases and 317 healthy control participants who underwent digital mammography. Breast density was measured separately using an automated volumetric system.

The study’s findings indicated that the automatic system was more accurate than the radiologists. Up to age 50, breast cancer patients had higher mammographic density than healthy patients. The control group had a significant decline in density with age that followed a linear pattern, while there was much more variability in density regression amongst the breast cancer patients.

“The cancer cases in no way followed that straight line,” remarked Perry. “It’s a very curvy, non-linear pattern. There is quite a difference between the breast cancer patients and the healthy controls.”

Thus, density risk is more relevant for younger age. Automated measurements could be more reliable than radiologists, as well as more suitable for density readings.

“It’s estimated that 40 percent of all life years lost to breast cancer are from unscreened women aged under 50 at diagnosis. Their tumors are often more aggressive and difficult to treat, with higher rates of reoccurrence,” said Perry.

This research could lead to alternative preventative strategies for younger women, such as an elective density estimation between 35 and 40 years old, concluded Perry.