乳房生検の代替策としての超音波検査（Abstract# SSK02-08 and SSK02-09）

標的を絞った乳房超音波検査により40歳未満女性の生検を減少させることが可能である

Targeted breast ultrasound can reduce biopsies for women under forty

局所の徴候や症状を有する40歳未満女性において、しこりを含む乳房の疑わしい領域に標的を絞った乳房超音波検査は、安全かつ信頼性が高く費用対効果にも優れ侵襲的な生検の代替策となる、と2009年Radiological Society of North America学会（RSNA 2009）で発表された。研究者らは、乳房のしこりを指摘された、または他の局所所見を有する若年女性において、標的を絞った超音波検査によりがんの可能性のある腫瘍塊と良性病変を鑑別する2つのスタディを施行した。最初のスタディでは30歳未満女性における1,123件の超音波所見が、2つ目のスタディでは30～39歳女性における超音波所見1,577件が対象とされた。両スタディにおいて臨床上問題となった部位のがん症例全てが標的超音波にて陽性と考えられた。さらに、超音波で陰性所見であったもの全てが乳房の良性病変を正しく見極めていた。超音波で発見されなかった唯一の悪性病変は検査の標的領域外の疑われなかった病変であった。このがんは乳房全体のマンモグラムで発見された。研究者らは40歳未満女性における触知可能なしこりの評価には超音波検査を選択することを推奨している。

Full Text

Targeted breast ultrasound of suspicious areas of the breast, including lumps, is a safe, reliable and cost-effective alternative to invasive biopsies for women under age 40, according to the findings of two studies presented today at the annual meeting of the Radiological Society of North America (RSNA).

"By performing high-quality breast ultrasound, we can reduce the number of expensive and avoidable invasive diagnostic procedures in young women," said senior author Constance D. Lehman, M.D., Ph.D., professor and vice chair of radiology at the University of Washington and director of imaging at the Seattle Cancer Care Alliance. "We don't want to be overly aggressive with this population."

The researchers conducted two studies in which targeted ultrasound was used to distinguish between potentially cancerous masses and benign findings in young women who had detected breast lumps or other focal (specific) areas of concern in their breasts. The first study included 1,123 ultrasound examinations of women under age 30, while the second included 1,577 ultrasound examinations of women ages 30 to 39.

Across both studies, all instances of cancer at the site of the clinical concern were positively identified through targeted ultrasound. In addition, all negative ultrasound findings correctly identified benign changes in the breast. The only malignant mass not identified by ultrasound was an unsuspected lesion outside of the targeted examination area. That cancer was identified by a full breast mammogram.

The incidence of malignancy among women in their 30s was 2 percent. The incidence of malignancy among women younger than 30 was 0.4 percent.

"Surgical excision or needle biopsy of tissue can be painful, expensive and frequently unnecessary in these age groups, which have very low rates of malignancies," Dr. Lehman said. "In most cases, monitoring with targeted ultrasound is a very safe alternative."

She added that ultrasound should be the diagnostic tool of choice for young women seeking care for breast lumps and other suspicious focal signs and symptoms. "It is time we used ultrasound to reduce unnecessary morbidity and costs associated with more aggressive invasive approaches," Dr. Lehman said.

Coauthors of the study addressing women under the age of 30 are Vilert Loving, M.D., Wendy B. DeMartini, M.D., Peter R. Eby, M.D., Robert L. Gutierrez, M.D., and Sue Peacock, M.Sc.

Coauthors of the study addressing women age 30-39 are Michael Portillo, M.D., Wendy B. DeMartini, M.D., Peter R. Eby, M.D., Robert L. Gutierrez, M.D., and Franklin Liu, M.D.

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