

11-gauge needle better than 14-gauge in breast biopsy

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Stereotactic vacuum-assisted breast needle biopsy, a common minimally invasive biopsy method used in the US, is more effective with an 11-gauge needle than the 14-gauge needle decreasing a physician's chances of false-negative diagnoses, according to a study performed at the Stanford University School of Medicine in Stanford, CA.

The study included 1,280 breast lesions that were consecutively biopsied using a 14-gauge or 11-gauge vacuum needle. Results showed that cancer was missed in 3/68 cases (4.5%) using the 14-gauge needle and in only 2/440 (0.45%) cases using the 11-gauge needle. "The 11 gauge is more accurate than the 14," said Roger Jackman, MD, lead author of the study.

"Specimens obtained with both needles are the same length, but those with the 11-gauge needle are larger in diameter and volume which presumably leads to the better results with the 11-gauge needle. Most women say the procedure is very tolerable with less discomfort than a trip to the dentist for a filling. I feel there is much more concern waiting for the results of the biopsy rather than the procedure itself," said Dr. Jackman. "Any woman undergoing a biopsy and physician performing a biopsy wants safety and accuracy. Accuracy is absolutely critical," he said.

"This procedure is the most accurate way to biopsy an abnormality found on a mammogram. It is one that is safer and less expensive than surgical biopsy. The triple headed win of accuracy, safety and cost savings is extremely exciting and important," said Dr. Jackman.

This study appears in the February issue of the *American Journal of Roentgenology*.

Source: American Roentgen Ray Society

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