

ASBS: New Guidewire Converts Non-Palpable Breast Lesions Into Palpable Ring for Surgical Removal

By Jill Taylor

ATLANTA, GA -- May 5, 2003 -- A circular guidewire creates definable sides for non-palpable breast lesions, making the lesions readily accessible to the surgeon, according to a study presented here May 3rd at the 4th Annual Meeting of the American Society of Breast Surgeons.

Cary S. Kaufman, MD, of the University of Washington department of surgery, and Bellingham Breast Center, Bellingham, Washington, and colleagues used the EnCircle™ wire (Vivant Medical, Inc.) to define lesions for excision in 25 patients requiring image-guided removal of lesions.

In contrast to guidewires that sit on one side of the lesion, the EnCircle™ wire is used to create a circle around the entire target area. "I can feel the tumour and am able to tell which side I'm at, so I'm better able to remove the cancer," Dr. Kaufman reported. Moreover, the device makes additional bracketing wires unnecessary.

Study protocol included intraoperative ultrasound localisation and two variations of the guidewire -- a mechanical sharp tip version and a radiofrequency tip version. The guidewire was deployed using a straight outer needle. Surgeons performed standard surgical excision after guidewire placement.

Thirteen patients had invasive ductal carcinoma (IDC), three had invasive ductal carcinoma with extensive intraductal component (IDC+EIC), four had invasive lobular carcinoma (ILC), and five had benign lesions.

Researchers reported proper localisation of imaged target lesions in all patients, and no direct tumour puncture occurred during guidewire use. Negative margins resulted in all but four cases (three IDC+EIC and one ILC) due to the presence of lesions not visible to imaging.

Although no complications arose for either guidewire variation, researchers noted the radiofrequency tip passed more easily through dense breast tissue.

The researchers recommended further study for validation of preliminary results.

[Poster: Encircling Guidewire Facilitates Complete Excision of Image-localized Breast Lesions.]