



# Breast MR Provides Pioneering Clinic with Excellent ROI While Enhancing Patient Care

For the women of Florida, Magnetic Resonance (MR) is proving itself a highly effective method for imaging the breast.

At least this is the assessment of Susan Curry, M.D., founder and medical director of the Women's Center for Radiology in Orlando. Having opened its doors in 1981 as one of the nation's first outpatient practices dedicated exclusively to women's health, the Center today conducts more than 90,000 procedures annually from two offices – one dedicated to screening, the other to diagnostics.

The Center's two offices, four Board-certified radiologists and 44-person support staff currently welcome about 200 women each day for the full range of breast screening and diagnostic procedures, Dr. Curry said – including digital mammography, whole-breast ultrasound and minimally invasive image-guided biopsy. In addition, ob/gyn sonography and bone-mineral densitometry are routinely provided.

Since the October, 2004, acquisition of a GE Signa® 1.5T MR system with VIBRANT™ signature application for breast diagnostics – a system that has since been augmented with the Signa HD upgrade – the Center's procedural load has expanded to include leading-edge breast MR.

## Outstanding Clinical Performance

"MR offers consistently superior visualization of the breast," Dr. Curry said. However, Dr. Curry stops short of recommending breast MR alone for high-risk patients.

"It has not yet been shown to replace mammography. Microcalcifications that we see on mammography may not show up on MR."

"With what we know today, it's best to use both tests for these patients."

As a result, mammography and breast MRI are now routinely prescribed for the Center's high-risk patients – those with a family or personal history of breast cancer, for example, as well as those proven to be high-risk by prior biopsy.

“The GE Signa 1.5T MR system with VIBRANT accommodates bilateral imaging so that we can complete the entire breast MR exam in less than a half hour.”

*Susan Curry, M.D.*

### Case in Point

Dr. Curry believes that breast MR is already saving lives. “Not long ago, a surgeon came to us with a palpable mass that wasn’t showing up on mammography or ultrasound. You can’t do a random needle biopsy, of course, so she asked us for a breast MR. We were able to see the lesion clearly and biopsy it on the spot.”

Dr. Curry said that, in some cases, multiple lesions will show up on mammogram and ultrasound, raising the prospect of multiple biopsies for the patient. “With MR, we can sometimes eliminate the need for this sort of trauma.”

### A Financially Sound Decision

Reimbursement is, quite naturally, a factor that can determine the viability of an equipment investment. Fortunately, Dr. Curry said, diagnostic breast MR is now reimbursed nationally, and her office manager is working with insurers to encourage coverage of screening MR for high-risk women.

To ensure a sound financial decision for her practice, Dr. Curry and her colleagues evaluated a range of MR scanners before selecting GE Healthcare’s Signa HD 1.5T system.

“We were taking a considerable risk with this investment,” she said. “We decided that if we were going to do it, we were going to do it right, with state-of-the-art equipment – an 8-channel MR coil, power injector, CAD, the works. We’re convinced we made the right choice across the board.”

The Signa HD 1.5T system not only provides the Center with outstanding resolution and thin-slice capabilities, it also offers a number of unique capabilities – with sagittal acquisition being a prominent example.

“Being a mammographer, sagittal views make it much easier for me to read the exam.”

This system also makes short work of even complex procedures, she added.

“It accommodates bilateral imaging so that we can complete the entire exam in less than a half hour.”

When used with CADstream (Confirma Inc., Kirkland, WA), the system streamlines MR-guided biopsies performed at the center.

Partly as a result of these capabilities, the Signa HD 1.5T system is delivering an excellent return on investment, Dr. Curry said.

“We knew up front that we needed to do two to four patients a day to break even. And I was frankly worried about that. As it turns out, my fears were unfounded; we are now averaging ten to twelve patients a day.

“So it’s a good investment, just as digital mammography has been for us. In both cases, we get better studies and higher reimbursements. And with more accurate results and fewer recalls, our patients are better off, too.”

### On the Horizon

Dr. Curry expects the Center’s volume of 2,500 MR procedures a year to continue growing as more physicians and women understand the significant advantages MR brings to the table.

The Center is now applying MR technology to another area of critical importance to women: cardiac MR, an ideal diagnostic tool in an era where women’s unique cardiology needs are making headlines everywhere.

Dr. Curry’s husband is a cardiologist who believes that MR is an excellent test for symptomatic women, as well as for following the hearts of those who are on certain types of chemotherapy.

While reimbursement remains an issue for this application, she believes that will eventually change.

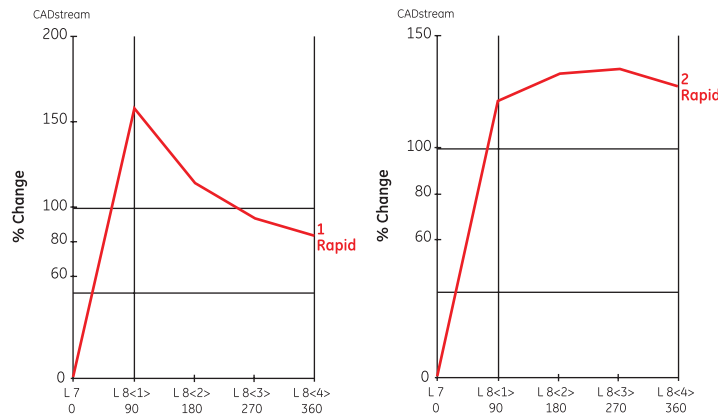
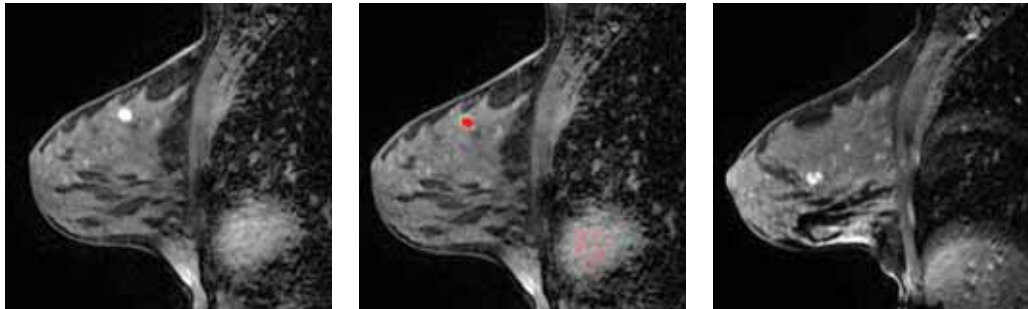
Breast cancer may be more of a threat to younger women, she pointed out, but heart disease remains the number one killer of women.

“We have in MR a non-invasive and highly-accurate test, and I believe it will one day become the dominant test for cardiac diagnostics.”

As committed as they are to women’s health, Dr. Curry added, she and her colleagues are proud to be pioneering MR’s application in fighting both of these deadly diseases. ■

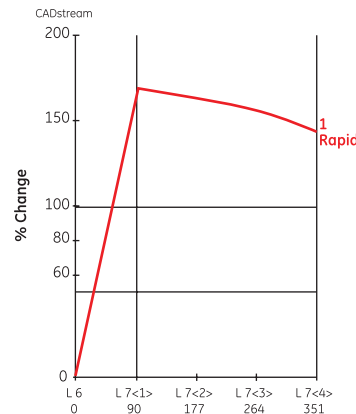
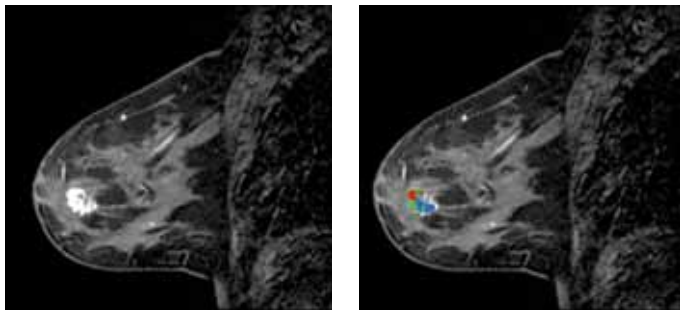
**Case 1**

Patient is a 48-year old pre-menopausal woman with dense tissue and a family history of breast cancer (her mother at age 52) with prior stereo core biopsy three years ago for microcalcifications that we biopsied proven fibrocystic. A normal mammogram with dense tissue, normal sonogram with few cysts all less than 1 cm. Had breast MR that reveals a rim enhancing mass at 12:00 of the left breast measuring 1 cm with abnormal kinetics of rapid wash in and rapid wash out. The right breast reveals a lobular mass, upper outer quadrant with rapid wash in and plateau kinetics. MRI Biopsy, left invasive ductal carcinoma, the 2nd area was felt by surgeon to be a cyst. A follow-up MRI showed same area of the right breast which by MRI biopsy was also an invasive ductal carcinoma.



**Case 2**

Patient is a 39-year old with family history of breast cancer. Screening mammogram with no symptoms. Patient is currently breast feeding with a nine-month old infant. Normal mammogram with dense tissue. No masses or microcalcifications noted. MRI reveals a 2 cm x 1.4 cm x 1.0 cm irregular mass with abnormal kinetics of rapid wash in and rapid wash out. Sonogram confirmation shows solid lobular mass, non-palpable that with sono core biopsy reveals invasive ductal carcinoma.



Susan Curry, M.D.

Susan Curry, M.D., founder and medical director, is a diplomate of the American College of Radiology and is Board Certified in Diagnostic Radiology and Nuclear Radiology. She completed her training at the University of Florida, College of Medicine and is fellowship trained. She was Instructor in Radiology and Assistant Professor of Radiology. She was Chief of Nuclear Medicine services at the University of Florida. Dr. Curry is a member of Phi Beta Kappa, Mensa and a member of many organizations and societies including the AMA, the American College of Radiology and the Society of Breast Imaging. Dr. Curry has been actively involved in several clinical trials and has been reading mammograms since 1978 and performing stereotaxic biopsies since 1992.

In October 2004, the Women's Center for Radiology completed the installation of its GE Healthcare Signa EXCITE Echo-Speed, High Field (1.5 Tesla) MRI system. Women's Center for Radiology was first facility in Florida to offer the VIBRANT (Volume Imaging BREast Assessment) protocol, and in 2005 was the first again to upgrade to the Signa HD MR system.

