



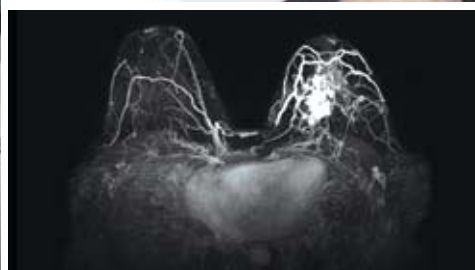
Ville Marie Breast MRI Center

Canada's first breast-dedicated MRI Center. While the technology and staff can also do other types of MRI, priority is always given to Breast MRI.

First Canadian site to combine the latest MRI technology and the Sentinelle breast coils to produce high quality breast MR imaging and MR breast biopsy capability.

Canada's first Siemens-Sentinelle designated Breast MRI Center of Excellence for image production, research and staff training and testing for new MRI-guided biopsy technology.

Unique MRI construction concept on the 9th floor permitting windows and natural sunlight to minimize confinement-related effects sometimes associated with MRI exams.



The Ville Marie Breast MRI Center is the first site to link the Espree MRI magnet to the new **Sentinelle's Vanguard** breast specific table. This unique partnership produces very precise breast images.

The Ville Marie MRI unit contains coils that can enhance the smallest details and help the Ville Marie Breast MRI experts to distinguish benign from malignant signals. The Ville Marie MRI unit also provides the most complete access possible for MRI-guided breast biopsies.



Canada's first breast-dedicated MRI Center

Breast MRI is now an integral component in the screening, detection, evaluation and management of breast cancer.

Prior Indications

Breast MRI has already been recognized as a very important breast imaging modality for higher risk patients based on accumulated and convincing data from numerous clinical trials done in the mid to late 1990s. Despite substantial differences in patient population and MRI technique, all reported significantly higher sensitivity for MRI compared to both mammography or any of the other modalities used. Kriege had screened 2000 unaffected patients aged 25 to 70 with an estimated 15% risk of breast cancer (19% proven gene carriers) and reported that 80% of the tumors were detected by MRI versus 33% by conventional film mammography, and tumors picked up by MRI were smaller than those detected by film mammography. Five subsequent trials in high risk patients produced similar results, with MRI sensitivity ranging from 71% to 100% versus 16% to 40% for film mammography.

These and other subsequent trials led to the current list of indications for a breast MRI found on the Ville Marie Breast MRI referral form (available on-line):

- to help mammography and high resolution ultrasound in monitoring high risk patients or patients with breast implants;
- to better evaluate the local extent and staging of established breast cancer prior to surgery, or to help assess residual tumor after surgery;
- to help monitor the efficiency of neo-adjuvant (prior to surgery) chemotherapy, immunotherapy or hormonal therapy;
- to better assess a local recurrence or to seek out an occult breast primary when associated with involved axillary lymph nodes.

Recent Recommendations

Two newer landmark papers have now established MRI as an integral breast screening modality.

THE AMERICAN CANCER SOCIETY GUIDELINES FOR BREAST SCREENING WITH MRI AS AN ADJUNCT TO MAMMOGRAPHY
(*CA Cancer J Clin* 2007;57;75-89).

This review article contains the American Cancer Society's new recommendations for regular monitoring using breast MRI:

- Gene carriers and their first-degree relatives;
- All patients with a 20% lifetime risk as defined by recognized risk tools, such as those utilized at the **Ville Marie Breast Cancer Risk Assessment Clinic**;
- Patients with prior chest radiation between ages 20 and 30;
- Certain patients included in the following categories (based on their individual cumulated risk factors):
 - lifetime risks over 15%;
 - lobular carcinoma in situ;
 - atypical lobular hyperplasia;
 - ductal atypical hyperplasia ;
 - heterogeneously dense breasts on mammography;
 - women with a personal history of breast cancer.

These recommendations are conditional on an acceptable level of quality of MRI screening, which should be performed by experienced providers in facilities that provide MRI-guided biopsy for the follow-up on any suspicious result.

MRI EVALUATION OF THE CONTRALATERAL BREAST IN WOMEN WITH RECENTLY DIAGNOSED BREAST CANCER
(*N Engl J Med* 2007;356;13:1295-1303).

In this study, MRI detected 30 clinically and mammography occult tumors in the contralateral breast in 969 patients with an established breast cancer. MRI detection was not marred by breast density. Forty percent of the tumors detected by MRI were DCIS and the average size of the invasive tumors, all node negative, was 10.9 mm. Since these tumors are likely to progress and some can eventually metastasize, if untreated, early detection is very important. **The authors thus recommend considering an MRI prior to undertaking surgery or neo-adjuvant therapy.**

The accompanying editorial suggested that the control of breast cancer for the foreseeable future will depend mostly on early detection, careful diagnostic evaluation and appropriate therapy. The editorial also pointed out that ultrasonography, MRI, and digital mammography will improve the outcome when they are used as a substitute for, or an adjunct to, conventional film mammography for women in whom the latter has not been useful. While supporting MRI, digital mammography has recently been shown to be a more effective imaging tool in younger women. Since conventional film mammography does not identify all breast cancers, newer imaging tools such as MRI and digital mammography can fill this void.

For information on how to book a Breast MRI exam at the Ville Marie Breast MRI Center, and assistance regarding travel options, please contact our staff at:

T. (514) 789.4011
F. (514) 788.4808

or consult the Ville Marie Breast MRI Center web page, which includes a downloadable referral form.

www.villemariemri.com

