

MRI 'best' for looking at breast cancer and more

April 11 2008

The use of MRI is effective in differentiating the blood supply to medial and lateral breast tumors, which is important in treatment planning and prognosis according to a study conducted by researchers at the University of Miami in Miami, FL and the Rabin Medical Center in Petah Tikva, Israel.

Blood supply of medial tumors is mainly through the internal mammary vessels while lateral tumors may be supplied by both the internal or lateral mammary branches.

“MRI is currently the best modality enabling us to visualize not only cancer in the breast but the effect it has on the surrounding anatomy, especially regarding vascular supply and lymphatic drainage,” said Ahuva Grubstein, MD, of the Rabin Medical Center and lead author of the study.

The study evaluated 47 tumors (24 medial and 23 lateral) in comparison to 54 negative and benign cases. Of the 24 medial tumors, 21 predominately received blood from the medial vessel (87%) while 3 predominately received blood from the lateral vessel (13%). Of the 23 lateral tumors, 11 predominately received blood from the medial vessel (47%) while 8 predominately received blood from the lateral vessel (35%). According to the study, 18% of the lateral tumor cases didn't demonstrate any predominant vessel. “We don't have enough data regarding aggressiveness of tumors and their blood supply, only that malignant tumors can change the normal breast blood supply and that

this change depends on the tumor location within the breast,” said Dr. Grubstein. “This change can be used as a marker for malignancy in comparison to benign findings,” he said.

“Our findings support existing differences between medial and lateral breast tumors regarding metastatic spread and survival. These differences may indicate a need for differential treatment modalities according to location,” said Dr. Grubstein.

Source: American Roentgen Ray Society

Citation: MRI 'best' for looking at breast cancer and more (2008, April 11) retrieved 24 April 2024 from <https://medicalxpress.com/news/2008-04-mri-breast-cancer.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--