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## MR imaging of brachial plexopathy in breast cancer patients without palpable recurrence.

[Lingawi SS](#), [Bilbey JH](#), [Munk PL](#), [Poon PY](#), [Allan BM](#), [Olivotto IA](#), [Marchinkow LO](#).

Department of Radiology, St. Paul's Hospital, Vancouver, BC, Canada.

### Abstract

**OBJECTIVE:** To investigate the role of MR imaging in detecting brachial plexus (BP) abnormalities in breast cancer patients with plexopathy but without palpable masses.

**DESIGN:** MR imaging of the BP was performed on 26 breast cancer patients with brachial plexopathy without palpable regional masses, using 0.5 T and 1.5 T imaging systems. Findings were correlated with the clinical diagnoses.

**PATIENTS:** Twenty-six patients with brachial plexopathy and history of breast cancer were enrolled in the study. All patients presented with plexopathy symptoms. Fourteen patients were positive and 12 patients were indeterminate for BP metastasis according to clinical criteria.

**RESULTS AND CONCLUSION:** MR imaging demonstrated masses involving the BP representing metastases in two patients. Nine patients had other regional abnormalities with a normal brachial plexus. It is concluded that MR imaging is useful in the assessment and direction of therapy of brachial plexopathy in breast cancer patients by detecting both metastases to the BP as well as other abnormalities, unrelated to the BP, which may explain the patient's symptoms.