

Role of Breast MRI in the Evaluation of Ductal Carcinoma In Situ.

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BACKGROUND: Ductal carcinoma in situ (DCIS) or intraductal carcinoma is a noninvasive breast malignancy. With the widespread use of mammographic screening, DCIS now accounts for 20–30% of breast cancers detected at screening mammography. However, not all DCIS cases progress to invasive carcinoma. Despite breast magnetic resonance imaging (MRI) has emerged as an important tool in the detection and characterization of breast cancer, its role in the evaluation of DCIS is still controversial. MRI can help to rule out invasive carcinoma in patients with DCIS on percutaneous biopsy. Some authors suggest that MRI may also help to evaluate the extent of disease and to identify more aggressive DCIS. **HYPOTHESIS:** The objective of this study is to evaluate the findings on breast MRI in patients diagnosed with DCIS.

METHODS: Retrospective, single-center study that evaluated patients submitted to percutaneous biopsy guided by mammography in the period from 01/2014 to 12/2015. We selected patients with diagnosis of DCIS on biopsy who performed breast MRI before definitive treatment.

RESULTS: 28 cases were included. The mean age of patients was 49.2 years (31-70 years). Histological analysis showed 9 DCIS with low / moderate grade (32.1%) and 19 with high grade (67.9%), being 6 cases (21.4%) with comedonecrosis. MRI showed positive findings in 24 cases (85.7%), including segmental non-mass enhancement in 10 (35.7%), mass in 8 (28.6%) and focal non-mass enhancement in 6 (21.4%). Twenty patients (71.4%) were subjected to further surgery. MRI findings were compared with the histological results of percutaneous biopsy and surgery, when available. In conclusion, these findings suggest that MRI may be useful in evaluating patients with DCIS. It can contribute to a better assessment of the extent of the disease and to identify patients with increased risk of associated invasive carcinoma.