

## **ABSTRACT**

### **AIMS AND OBJECTIVES:**

As the incidence of breast carcinoma is rising, there is increased incidence of patients with metastasis. The metastasis of spine is the most common in breast cancer. As high as 16-20% patients with LABC (locally advanced breast carcinoma) harbor occult spine metastasis and hence there is a need to detect such metastasis in an early stage as it would change the management plan altogether. The cost and non availability of bone scan (scintigraphy), the recent evolution of MRI techniques in detecting metastatic lesion in spine earlier than CT prompted us to reconsider the imaging techniques required for metastatic work up patients with LABC. Here we compare the effectiveness of CT & MRI spine in detecting occult spine metastasis.

### **METHODOLOGY:**

64 patients with locally advanced breast cancer who presented to govt rajaji hospital OPD were included for the study after their consent. All the patients were evaluated by CT and MRI spine. There was no expense spent by the patient as the expense of CT and MRI spine is covered

under chief minister insurance scheme. It was ensured that all the reports were issued by a single radiologist.

## **RESULTS:**

Of the 64 patients, 11 patients had occult spine metastasis. Out of the 11, 2 patients were detected by CT spine and MRI SPINE. The other 9 patients were detected by MRI alone. P value=0.038

The age of the patients with metastasis were between 46-65. All the 2 patients above 65 years had metastasis. P value=0.72

All the patients with sine metastasis had their primary lump in the upper quadrant. P value =0.001

The lump size had an influence in the metastatic deposits as most patients with spine metastasis had a lump size of >5cms. p value 0.038

## **CONCLUSION:**

Based on our study MRI spine is the preferred choice to investigate occult spine metastasis and should be incorporated in the metastatic work up o patients with LABC.