

## **Bone metastases from Breast cancer – Do we need both Bone scan and CT ?**

L. Potti, S. Sharma, A. Redman. Queen Elizabeth Hospital, Gateshead.

**Background and Aims:** Our current practice is to perform both CT and Bone scan to detect bone metastases in patients with advanced breast cancer. We aimed to determine if Bone scans added value to staging these patients.

**Methods:** We performed a retrospective study over a two year period of 155 patients who had CT (Thorax/Abdomen ± Pelvis) and Bone scans less than two months apart. The CT scans were blindly assessed for bone metastases by two experienced radiologists. Bone scan results were obtained from the validated reports.

**Results:**

There were 84 patients who had primary staging for advanced breast cancer. Of the 6 patients with metastases, CT was positive in all while bone scan was positive in 5. Bone scan was false negative in one case and false positive in 14 leading to further investigations.

There were 71 patients who had staging for recurrence or symptoms. There were 26 patients with bone metastases. Both CT and bone scan were positive for bone metastases in all these patients. Bone scan was false positive in 11 cases.

Bone scan did not identify any additional true positive cases.

**Conclusion:**

Our findings suggest that routine Bone scans are not required in staging patients with advanced breast cancer. Bone scans could be used more selectively in cases where CT findings are equivocal and when CT is positive to assess the extent of bone metastases.