How Useful Is Imaging of the Legs In Whole Body SPECT-CT for Cancer Staging?

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Objective

Whole body SPECT-CT is the optimal imaging technique for metastatic workup with higher sensitivity and specificity compared with planar and targeted SPECT-CT.

The aim is to determine if planar static images of the legs are clinically useful when performing whole body SPECT-CT for cancer staging.

Methods

Thirty three patients with a clinical indication of cancer staging (breast and prostate cancer) were included in this study. A 3-bed position bone SPECT-CT from the vertex to mid-thighs was performed approximately 3 hours after an intravenous injection of 800MBq of 99mTc HDP, and static planar images of the legs were performed.

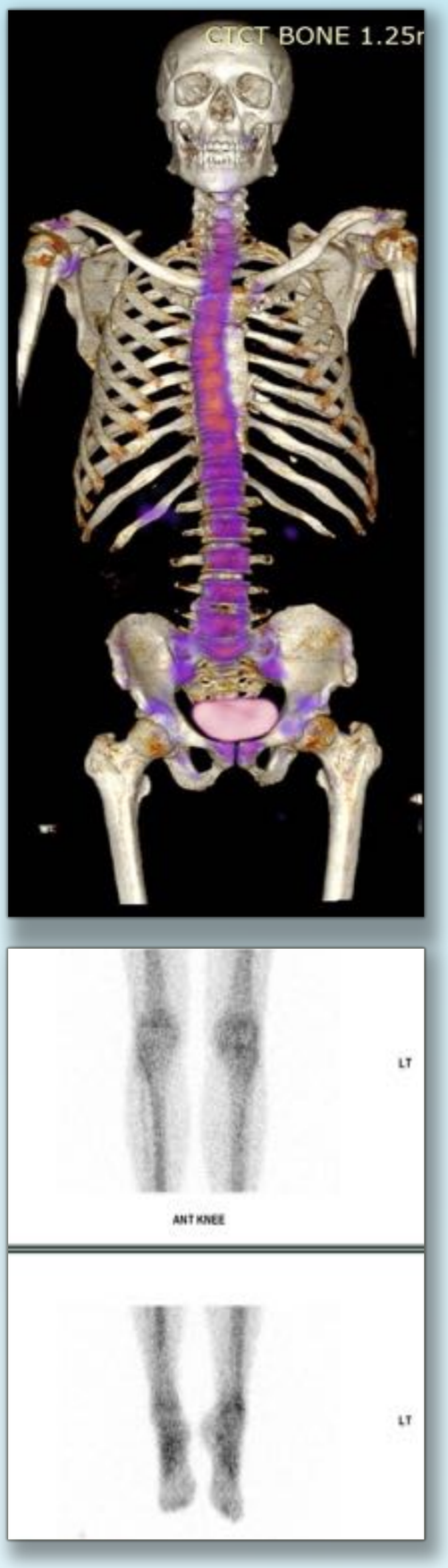
Methods

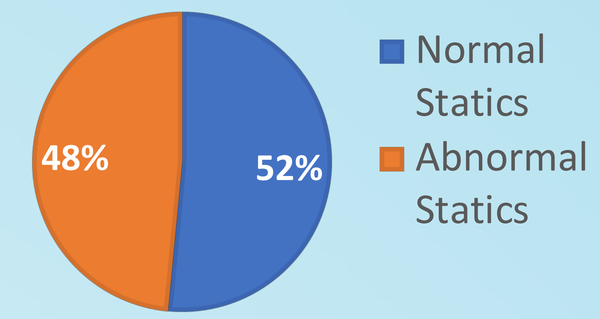
The scan report and acquired images were reviewed to identify how many lesions were reported as benign or malignant, and whether the static imaging identified bone metastases which were not seen on SPECT-CT.

Results

16 patients (48%) had abnormal uptake in the lower legs on static imaging.

Abnormal uptake was mostly benign degenerate joint disease.



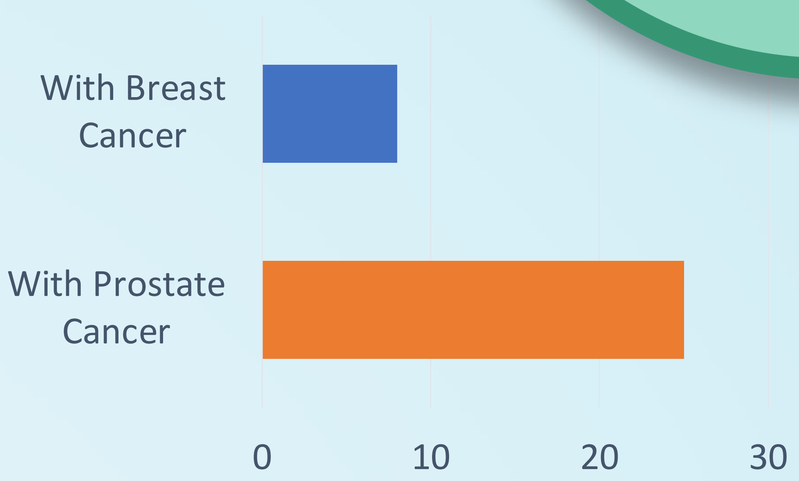


There were no cases of isolated metastases in the legs.

CONCLUSION

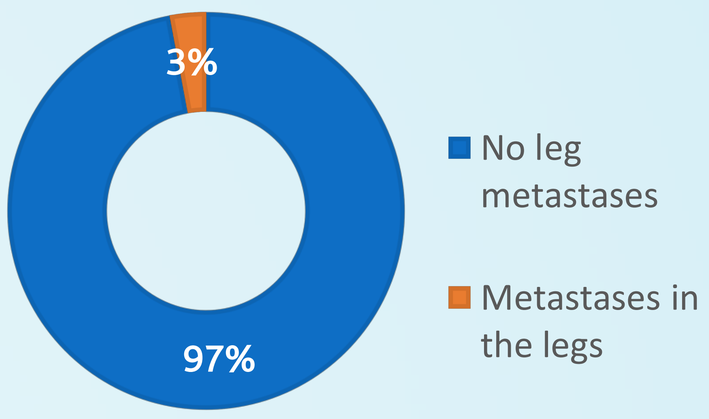
Routinely performing planar static views of the legs for cancer staging was not clinically useful in this series.

No Metastases on whole body SPECT-CT with statics of knees and ankles



Results

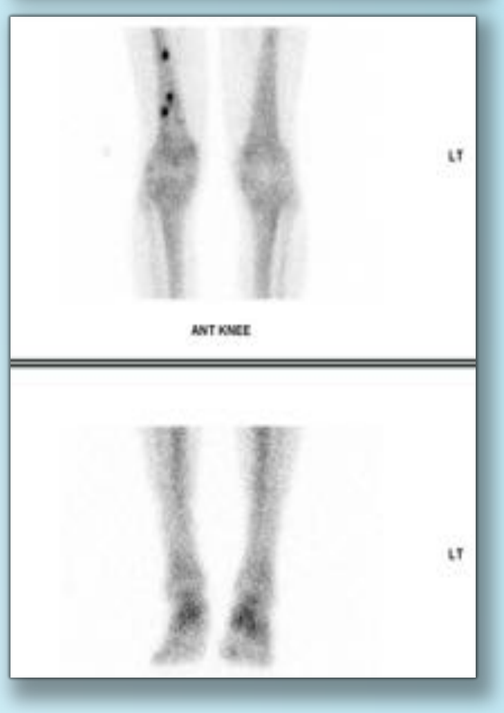
33 patients were included (25 had prostate cancer and 8 had breast cancer).



Results

Only one patient (3%) had bone metastases in the legs on static imaging.

However, in this case there was also widespread metastatic disease on SPECT-CT.



Multiple metastases on whole body SPECT-CT and in the right femur on statics of the knees and ankles

In relation to this presentation, I declare that there are no conflicts of interest.

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