

Cod: PO124

USEFULNESS OF SPECT/CT FOR LYMPHATIC MAPPING IN BREAST CANCER SURGERY

G. Castriotta², M. Di Bari², L. Trotta², L. Ciuffreda¹, R. Murgo¹, V. Frusciante¹

¹Breast Surgery Unit , IRCCS Casa Sollievo della Sofferenza , San Giovanni Rotondo , Italy

²Nuclear Medicine Unit , IRCCS Casa Sollievo della Sofferenza , San Giovanni Rotondo , Italy

BACKGROUND-AIM

SPECT/CT allows fusion of tomographic lymphoscintigrams with anatomical data from CT. Aim of our retrospective study was to evaluate the additive contribution of SPECT/CT in correctly mapping lymphatic drainage in breast cancer patients

METHODS

We studied with SPECT/CT 52 sequential women referred for sentinel lymph-node (LN) search before breast cancer surgery. SPECT/CT was performed immediately after usual planar imaging. SPECT/CT studies were done with a dual-head Symbia T16 (16 slices spiral CT) equipped with high resolution low-energy collimators , 6° steps of 30 sec each.

RESULTS

In 51 pts at least 1 LN was detected in planar imaging. In 11 pts SPECT/CT visualized more LNs than planar study (9 additional LNs). In 2 further pts planar scintigraphy showed 2 LNs non detected by radioguided surgery (SPECT/CT false positives). Moreover SPECT/CT allowed the correct localization of 5 LNs at level II and of 9 LNs in the posterior axilla. In 2 pts planar imaging showed a faint uptake in 2 lymph nodes not visualized at SPECT/CT but confirmed at surgery (SPECT/CT false negative).

CONCLUSION

SPECT/CT allowed to visualize more LNs than planar imaging and to correctly locate LNs at level II; moreover it correctly identified 2 false positives of planar imaging.