Non palpable Breast lesions and a review about ROLL and SNOLL Technique: The Experience of the European Institute of Oncology on 2917 (focused on 1258 cases) patients from 2000 to 2006

Simonetta Monti
European Institute of Oncology, Italy

The widespread use of mammographic screening and ultrasound to detect breast lesions has resulted in a steady increase in the number of non-palpable lesions detected. The main problem with these lesions is precise pre-operative localization. ROLL (radioguided occult lesion localization) is the most recently developed localization technique which involves injection of radiotracer into the lesion under stereotactic or US guidance and surgical removal with the aid of a gamma ray detecting probe. If pre-operative or intraoperative diagnosis of malignancy is obtained, sentinel node biopsy (SNB) is necessary to stage the axilla. In these cases simultaneous ROLL and SNB (=SNOLL) can be performed in one surgical session using immobile radiotracer to locate the lesion and mobile radiotracer to locate the sentinel node. At present in our institute some of 20% of the cases are treated when non palpable.

Results: From January 2000 to December 2006, in our institute were treated 2917 patients with non palpable breast lesions. The analysis focused on 1,258. All patients underwent radioguided occult lesion localization (ROLL), axillary dissection when appropriate. Most tumors were characterized by low proliferative rates (68.9%), positive estrogen receptors (92.3%), and non-overexpressed Her2/neu (91.3%). Five-year overall survival was 98.6%. These data show that the cumulative incidence of events was very low reinforcing the conclusion that very early diagnosis improves prognosis. The ability of radioguided surgery to identify the occult lesion and the simultaneous use of SNB and ROLL is safe and appreciated by the patient as it completes the surgical treatment of the lesion in a single session.