

World Congress on **Breast Cancer**

August 03-05, 2015 Birmingham, UK

The importance of intraoperative ultrasound guidance to achieve negative margins for palpable and nonpalpable breast cancer

Guldeniz Karadeniz Cakmak

BulentEcevit University School of Medicine, Turkey

Margin positivity is one of the most conflicting issues in breast conserving surgery (BCS) with a reported rate up to 25%. In an attempt to achieve negative margins intraoperative ultrasound guidance (IUG) was performed during BCS for palpable and nonpalpable breast cancer. Between 2011 and 2015, 259 patients underwent IUG-BCS with the diagnosis of in situ or invasive carcinoma. Intraoperative localization protocol includes ultrasound visualization of the lesion, tumor margin determination under real-time sonographic guidance, and image confirmation of specimen and tumor bed. Sonographic and macroscopic assessment of the surgical margins by surgeon was followed by frozen section analysis of each margin. Of the 259 patients, 45.1% had palpable and 54.9 % had nonpalpable tumors. The sensitivity of intraoperative ultrasound localization was 100%. Negative margins were achieved in 92.2 % of nonpalpable and 91.4% of palpable lesions at the initial procedure. The involved margins were correctly identified via specimen sonography in 95.4% of the cases. According to frozen section analysis of the 1554 ultrasonographically clear margins, re-excisions were required for 2.3% of cases with the majority of these proved to have significant degrees of DCIS. A second operation was required only in five cases, for either determination of close margins or multifocality at cavity shaved margins, without residual cancer on pathological examination of the reoperative specimens. The cost-time analysis and calculated resection ratio determined nothing significant between groups. IUG-BCS is an invaluable and effective modality for both palpable and nonpalpable breast cancer in obtaining clear surgical margins with optimum resection volumes and reducing re-operations. Furthermore, frozen section analysis of the specimen margins together with shaving cavity margins of the tumor bed for permanent analysis could be a feasible method for minimizing the requirement for reoperations.

Biography

Guldeniz Karadeniz Cakmak is an Associate Professor in the Department of General Surgery at BülentEcevit University The School of Medicine. She is also Director of the General Surgery Department and Vice-President of the Surgical Sciences Division. She earned her MD from Istanbul University, Cerrahpasa Medical School. Her research interests include breast cancer, oncoplastic breast surgery, intraoperative breast ultrasound and sentinel node mapping. Her laboratory and clinical research include surgical treatment modalities for early stage breast cancer. She has authored more than 50 scientific research papers and presented numerous papers, lectures and workshops nationally and internationally.

Notes: