

## SENTINEL NODE BIOPSY PLUS OCCULT LESION LOCALISATION (SNOLL) – ONE CENTER EXPERIENCE

**Dariusz Michalik<sup>1</sup>, Hanna Bartnikowska<sup>2</sup>, Ewa Socha-Witulska<sup>3</sup>,  
Danuta Shafie<sup>4</sup>**

<sup>1</sup> *Department of General, Vascular and Oncological Surgery, Provincial Specialist Hospital in Olsztyn*

<sup>2</sup> *Division of Diagnostic Imaging, Provincial Specialist Hospital in Olsztyn*

<sup>3</sup> *Unit of Nuclear Medicine, Provincial Specialist Hospital in Olsztyn*

<sup>4</sup> *Unit of Pathomorphology, Provincial Specialist Hospital in Olsztyn*

**Introduction.** Breast cancer is more and more frequently diagnosed in its subclinical stage. Surgical treatment of these lesions consists of the local removal of a tumor mass with tumor free surgical margins and the evaluation of the axillary lymph node status. We report our experience with using radioguided occult lesion localization (ROLL) combined with sentinel node biopsy (SNOLL) when removing nonpalpable breast lesions.

**Aim.** To evaluate the usefulness of the SNOLL method for surgical local treatment of malignant nonpalpable breast lesions.

**Materials and methods.** Between August 2009 and November 2010, 11 patients with histopathologically confirmed, nonpalpable breast cancer were treated in our Institution. All patients underwent SNOLL with immobile radiotracer injected into the lesion under ultrasound guidance and mobile tracer injected intradermally to determine sentinel node.

**Results and discussion.** All lesions were localized and removed with the use of ROLL. The average size of the lesion was 1.25 cm. The lesions were localized as follows: 7 in the left breast, 3 in the right breast and 1 in both breasts. In 10 cases we diagnosed invasive ductal carcinoma and in 1 case lobular carcinoma. Tumor free surgical margins were achieved in 7 (64%) cases. The smallest average margin was 2.6 mm. Sentinel nodes were marked in all cases and were positive in 2 (18%) patients. The average number of removed nodes was 1.2 (1–2). We observed only one complication – hematoma. Due to oncological indications 4 patients required resurgery. In sum, breast conserving therapy (BCT) was performed in 9 cases (82%), whereas 2 patients resigned from continuing BCT.

**Conclusions.** SNOLL is a safe and effective procedure in the treatment of nonpalpable breast cancer.