Breast biopsy with needle localization: factors influencing complete excision of nonpalpable carcinoma

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Purpose. *Biopsy with needle localization of nonpalpable breast tumor may be diagnostic, however preferably, it should be therapeutic. The latter may be achieved if tumor is completely excised, i.e. with clear surgical margins. Our aim was to find out the factors related to complete excision of nonpalpable tumor.*

Patients and methods. *During a two-year period 215 patients (age range 32-74 years, median 55 years) underwent biopsy after needle localization of 222 nonpalpable breast lesions. Mammographic, operative and pathological factors were correlated with the outcome of surgery using contingence tables in SPSS statistical software.*

Results. *According to mammographic features, the biopsy yield rates were 67% in spicular masses, 38% in microcalcifications and 35% in tumors. A total of 96 malignant tumors were diagnosed (overall biopsy yield rate 43%): 38 in situ and 58 invasive carcinomas. Surgical margins were clear in 44, close in 20 and involved in 32 cases. Margins were likely to be clear if the tumor was mammographically spiculated and smaller than 9 mm, and if more than 50 g of tissue was excised. On the contrary, the margins were likely to be involved in micro calcifications, tumors bigger than 9 mm and if less than 50 g of tissue was excised. Reoperation was performed in 41 cases (22 mastectomy, 19 reexcision) because of non-clear margins; residuum was diagnosed in 21 of them. No residuum was observed if the tumor was mammographically spiculated; however, it was detected in 17 of 25 reoperated microcalcifications.*

Conclusion. *Complete excision of nonpalpable breast malignoma correlates with the mammographic features, tumor size and weight of excised tissue. Complete removal of large microcalcifications remain a puzzling surgical task.*

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