

Breast cancer development in patients with borderline breast lesions

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Context. With the introduction of mammography breast screening we observed an increased detection rate of benign lesions with a doubtful radiological aspect or with a borderline histological result.

Objective. Our aim was to determine how many women with a previous diagnosis of breast lesion of uncertain significance developed breast cancer during the follow-up and to assess their risk factors.

Methods. Retrospective study about women followed up in our surgical outpatient facility who underwent a diagnosis of breast lesion of uncertain malignant potential between January 2003 and June 2014. Main outcomes were the occurrence of breast cancer during follow up and the possible risk factors for development of breast cancer.

Results. Fifteen of 513 included women developed breast cancer during the follow up. The cumulative incidence of new breast cancer diagnosis among these women affected by borderline breast lesions was 4.3% (95% CI, 1.9-6.6%) at 7 years of follow up. In addition, lobular intraepithelial neoplasia and the presence of atypical ductal hyperplasia in the surgical excision specimen, as well as the coexistence of hypothyroidism resulted to be significant risk factors for new breast cancer development among these patients.

Conclusions. Atypical ductal hyperplasia, lobular intraepithelial neoplasm, and hypothyroidism were significant risk factors for new breast cancer diagnosis during follow-up among patients with borderline breast lesions. The improvement of breast cancer prediction among borderline lesions could help to optimize their follow up and management in order to reduce over treatment of low-risk patients while improving breast cancer diagnosis among high-risk women.

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