Correlated factors of breast tissue density in mammography of Iranian breast clinic patients

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Abstract

Background: Mammography is an approved screening technique which may reduce breast cancer mortality. Evidences suggest that women with high breast density are four to five times more likely to get breast cancer than women with low breast density. In order to examine the effect of several factors on mammographic density, we designed and conducted this study in our breast clinic.

Methods: In this cross sectional study a structured questionnaire consisting of several variables such as age, reproductive index, BMI, OCP consumption, age of menarche, breast cup size was fulfilled. Completed data were analyzed and their correlation with breast density was studied. We used chi square test and logistic regression for determining the relationship between the covariates and density of breast tissue variable.

Results: In total 428 questionnaires were reviewed. About 65% of populations (277 women) were under the age of 50 year and 44% of them were more than 50. The results indicate that there is a significant correlation between the low age, low BMI, premenopausal status and small breast cup size with breast density in mammography (P<0.0001). But the other variables did not show significant correlation.

Conclusion: High density of breast tissue in premenopausal young women with lower BMI may decrease the sensitivity of mammography. This finding insists on the importance and necessity of short interval examination and applying other diagnostic procedures in these women.

Keywords: Breast cancer, Breast density, Mammography.