

The Impact of Age, Age of Menarche and Age of Menopause on Breast Density in Iraq

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ABSTRACT

Background: Breast density is a determinant for breast cancer.

Objectives: To report on breast density in Iraq.

Methods: A total of 300 attendants to the woman health center in Al Elwiya teaching hospital, Baghdad, was included in the study. Categories of breast density were according to American College of Radiology. For convenience, the density was regarded as dense and non-dense. Requested information was taken from case report.

Results: Density of breast was higher in younger age ($p=0.001$). Age of menarche and menopause were not affecting the density of breast ($p= 0.2$ and 0.9 , respectively).

Conclusion: The effect of age, age menarche and age of menopause on breast density is similar to that reported in the world.

Keywords: Breast density, Age, Menarche, Menopause, Iraq.

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Breast density is determined as a risk factor for breast cancer ⁽¹⁾. Increased density results in reducing the sensitivity and specificity of mammography ⁽²⁾. Published data on breast density in Iraq is scarce, and even the accuracy of mammography. Therefore, this study was carried out to report on breast density in Iraq.

A total of 300 attendants to the woman health center in Al Elwiya hospital- Baghdad were included in the study. Their age was 49.5 ± 8.5 year. They were selected by random sampling for the period 1st of October to 1st of December 2018.

The breast density was classified according to the American College of Radiology. For convenience the four categories were categorized into two (dense and non- dense). Age, age of menarche, age of menopause were taken from file records and expressed as continuous variables. Difference in density was examined by student's t test. $P<0.05$.

Age of those with dense view was 45.3 ± 5.5 year and those with non- dense view was 51.03 ± 8.8 year. A significant difference in age between the two groups ($P = 0.001$). The age of menarche and menopause is in those with dense breast was 12.8 ± 0.9 year, 48 ± 6.4 year, respectively, those with non-dense view was 13 ± 1.2 year, 48.1 ± 5.4 year, respectively. There were no significant differences in the age of menarche and menopause among the dense and non- dense groups ($p=0.2$ and 0.9 , respectively), (Table 1).

In the line of that in literature ⁽³⁾, density was negatively associated with age.

The finding that the mammographic density was not affected by age of menarche ($p=0.2$) is in agreement with that reported in Iran ⁽³⁾. However, the finding is in contrast with that of other studies ⁽⁴⁾. This controversy might be explained by changing the age of menarche in Iraq during the past decades ⁽⁵⁾.

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Age of menopause was not effecting on mammographic breast density ($p=0.9$). This finding is in agreement with that in other studies ⁽⁶⁾.

The effect of age, age of menarche, age of menopause on breast density is similar to that reported in the world.

Table 1: Mammographic density distribution.

Variable	Mammographic Density				T test		
	No.	Dense Mean \pm SD	No.	Non-dense Mean \pm SD	t	df	p
Age	80	45.3 \pm 5.5	220	51.0 \pm 8.8	5.4	298	0.001
Age of menarche	80	12.8 \pm 0.9	220	13.0 \pm 1.2	1.25	298	0.2
Age of menopause	13	48.0 \pm 6.4	120	48.1 \pm 5.4	0.05	131	0.9

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