

## THESIS ABSTRACT

### Association of Oral Contraceptives use with Breast Cancer and Hormone Receptor Status in Iraqi Women

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**Background:** Worldwide, there is a significant concern regarding the association of breast cancer risk and oral contraceptives use. Differences in demographical and pathological breast cancer characteristics in Iraqi patients have been reported compared to other western countries; however, studies addressing the risk of breast cancer among oral contraceptive users in Iraq and subsequent correlation with hormonal receptor status are lacking.

**Aim:** The aim of the study was to evaluate association of breast cancer risk and oral contraceptives use in patients visiting tertiary oncology center and to correlate hormone receptor status with history of oral contraception use in breast cancer patients.

**Patients and methods:** Two hundred women with breast cancer were compared regarding patterns of oral contraceptives use with 300 age-matched healthy female controls by personal interview and questionnaire. Patient's records were reviewed for hormone receptor status.

**Results:** A significantly higher proportion (49%) of women with breast cancer reported a positive history of combined oral contraceptives use as compared with (35.7%) healthy controls. Ever oral contraceptives users had a significantly increased risk of breast cancer (odds ratio [OR] = 1.73; 95%, confidence interval = 1.2–2.5,  $p = 0.003$ ), with the highest risk was seen in early use before the age of 20 (OR = 6.62,  $p = 0.02$ ); whereas increased duration of use did not significantly increase the risk of breast cancer. There was no significant association between estrogen and progesterone receptors expression profile in breast cancer patients and combined oral contraceptive use.

**Conclusion:** In Iraqi women, the risk of breast cancer increases with oral contraceptives intake particularly when starts early before the age of 20 years. The hormonal receptor status of breast cancer patients is not significantly affected by combined oral contraceptives use.