

## Correlation of Menstrual Irregularity and Diminution of Cyclic Mastalgia

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Published May 19, 2022

### ABSTRACT

**Background & Objective:** Cyclic mastalgia is clinically related to alterations in sex hormone levels during the menstrual cycle. A derangement in normal menstrual cycle leads to exacerbated mastalgia; which can also cause menstrual irregularities and abnormal uterine bleeding (AUB). A decrease in severity of mastalgia is observed in patients with simultaneous cyclic mastalgia and menstrual irregularities/AUB, following correction of menstrual irregularity. This study was designed and conducted to investigate the possibility of whether correction of menstrual irregularities can diminish cyclic mastalgia.

**Materials & Methods:** This case-control study was carried out on women suffering from simultaneous mastalgia and menstrual irregularity. One-hundred and fifty patients were randomly distributed between case and control groups, each including 75 patients. Patients in both groups took 100 mg vitamin E oral tablet daily for 3 months. Patients in case group also received low-dose oral contraceptive pills (OCP-LD) to correct menstrual irregularity. Patients recorded the severity of mastalgia in Cardiff breast pain chart using Visual Analogue Scale (VAS).

**Results:** At the beginning of study, there was no significant difference in the number of days suffering from mild and severe mastalgia between two groups. However, at the end of the study, mild and severe mastalgia reduced significantly in the case group compared to the control group ( $P=0.003$  and  $P=0.045$ , respectively).

**Conclusion:** In women with cyclic mastalgia, correction of menstrual irregularity leads to significant pain relief. Correcting menstrual irregularity is suggested as a first-line treatment in women with mastalgia.

**Keywords:** Abnormal uterine bleeding, Breast pain, Mastalgia, Menstrual irregularity, Oral contraceptive, Vitamin E

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**Citation:** Karimian F, Akhavan S, Marzoughi A, Keramati MR & Ashouri M. (2022) Correlation of Menstrual Irregularity and Diminution of Cyclic Mastalgia. J Womens Health Safety Res, 6(S1): 04.

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