IS GNRH AGONIST A GOOD WAY FOR FERTILITY PRESERVATION IN YOUNG WOMEN WITH BREAST CANCER WHO GET CYCLOPHOSPHAMIDE REGIMEN

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Backgrounds:
25\% of breast cancer cases are detected during premenopausal period and number of young women suffered from breast cancer is increasing in the world especially in Iran. Preservation of fertility and ovarian function leads to improve quality of life of these patients.
The aim of this study was to evaluate the effect of GnRHa agonist on menstrual reverse on breast cancer cases on treatment of cyclophosphamide regimen.

Materials and Method:
This randomized clinical trial (RCT) was conducted on 42 adenocarcinoma cases. Mean age of patients was 37±5 (25 to 45 years). Primary stages to stage II (T2N1M0) whose histology reports were negative ER/PF were enrolled in this study. All the enrolled patients were candidate for cyclophosphamide (600 mg/m\textsuperscript{2}), Adriamycin (60 mg/m\textsuperscript{2}) and taxoter (75 mg/m\textsuperscript{2}) chemotherapy regimen.

Results:
Spontaneous menstrual reverse was occurred in 90.5% of patients received Dipherelin during 3-6 months after treatment which was occurred in 33.3% of control cases.
In control group, 14.3\% (3 cases) had oligo menorrhea and hypo menorrhea during chemotherapy and 19 \%( 4 cases) had spontaneous menstrual reverse after 3-6 months. It should be noted that there was a significant difference between controls and cases (p <0.001).This difference was insignificant in cases younger than 35 (P<0.594).In 100\% of patients older than 35 who received Dipherelin, spontaneous menstrual reverse occurred during 6 months after chemotherapy, but this happened in only 20\% of controls.(P<0.001).
Mean serum level of FSH and LH during and 3 months after therapy was significantly lower in cases with controls, but serum level of estradiol was significantly more in cases 3 months after chemotherapy.(P<0.001)

Conclusion:
GnRHa agonists significantly improve ovarian function and fertility. They also lead to spontaneous menstrual reverse in negative ER/PR breast cancer cases.
Key word: Breasct cancer, fertilize women, Menstural reverse, chemotherapy, cyclophosphamide