## P-1004 - EVALUATION OF THE EFFECT OF OMEGA-3 FATTY ACIDS IN THE TREATMENT OF PREMENSTRUAL SYNDROME

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**Objective:** To evaluate the effects of Omega-3 on PMS.

**Method:** A randomized double blind controlled trial was performed on 184 eligible women. 124 women finally finished the study.

In the case group (n=70), Omega-3 and in the control group (n=69) placebo was prescribed.

**Results:** There were no significant differences between the two groups according to age, BMI, level of education, and the severity and duration of primary symptoms.

45 days after commencing Omega-3, the mean severity of depression (1.85 $\pm$ 0.73 vs 3.72  $\pm$ 0.65, P=0.03), anxiety (1.53 $\pm$ 1.04 vs 4.07  $\pm$ 0.91, P=0.02), lack of concentration (2. 49 $\pm$ 1.26 vs 5.73 $\pm$ 1.34 P= 0.03) and bloating (0.95 $\pm$  0.15 vs 2.31 $\pm$  0.19 P=0.02) in the case group, were all significantly lower than in the control group.

The duration of depression  $(4.25\pm1.02 \text{ vs } 7.21\pm1.32 \text{ days}, P=0.04)$  and bloating  $(5.53\pm2.27 \text{ vs } 8.33\pm1.04 \text{ days}, P=0.031)$  in the case group were less than in the control group.

90 days after commencing the treatment, the mean severity of depression  $(0.95\pm0.75 \text{ vs } 3.43\pm0.65, P=0.007)$ , anxiety  $(0.79\pm1.04 \text{ vs } 3.89\pm0.91, P=0.004)$ , lack of concentration  $(1.48\pm1.26 \text{ vs } 5.63\pm1.34, P=0.009)$ , bloating  $(0.74\pm0.15 \text{ vs } 2.14\pm0.19, P=0.004)$ , nervousness  $(2.15\pm0.93 \text{ vs } 6.09\pm0.86, P=0.01)$  and the duration of depression  $(2.12\pm0.25 \text{ vs } 7.46\pm0.02, P=0.01)$ , nervousness  $(2.04\pm0.39 \text{ vs } 6.33\pm1.45, P=0.02)$ , anxiety  $(4.45\pm1.02 \text{ vs } 8.23\pm1.94, P=0.03)$ , lack of concentration  $(2.16\pm0.26 \text{ vs } 5.55\pm1.02, P=0.02)$ , bloating  $(3.32\pm1.01 \text{ vs } 8.38\pm2.32, P=0.004)$ , headache  $(2.12\pm0.94 \text{ vs } 4.28\pm1.58, P=0.04)$  and breast tenderness  $(4.35\pm1.31 \text{ vs } 7.85\pm2.08, P=0.02)$  were lower in the case group.

**Conclusion:** Omega-3 fatty acids reduces the symptoms of PMS.