



OPTIMIZING THE TREATMENT OF WOMEN WITH PCOS

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Objective: to study the effects of vitamin D and myo-inositol on carbohydrate metabolism and the hormonal profile of women with PCOS

Methods: The diagnosis of PCOS was performed in accordance with Rotterdam's 2003 criteria. The levels of vitamin D were determined from the index of the hydroxy acid of vitamin D by means of solid phase analysis. The study of indices of insulin resistance (Caro, HOMA), a test for glucose tolerance was studied. Statistical processing was carried out using the standard package of programs of applied statistical analysis (Statistica for Windows v.6).

Patient (s) of 45 women with PCOS. 20,28 $\hat{\pm}$ 1,7 years Control group (N) - 31 healthy women of reproductive age (20, 95 $\hat{\pm}$ 145 years) Intervention (s): allocations for help Vit. And myo-inositol in a dose of 2 g for 8 weeks.

There were no significant differences in BMI among the subjects among the subjects, and 19 patients (42.2%) with PCOS experienced impaired glucose tolerance. Intragroup analysis of the level of vitamin D and insulin in women with PCOS showed negative correlations of the mean ($r = -0.43$, $p = 0.034$) with normal glucose tolerance ($n = 26$) $g = -0.51$ $p = 0.001$), In Patients With impaired tolerance ($n = 19$) to glucose, which demonstrates the negative effect of reducing vitamin D levels on insulin resistance in women with PCOS. Analysis of the level of vitamin D and hormones in patients with PCOS showed a negative correlation between the median strength between the level of Ttotal, DHT and vitamin D deficiency ($r = -0.37$ $p = 0.05$, $r = -0.38$ $p = 0.05$) In the case of vitamin D deficiency, this ratio was more pronounced: ($r = -0.27$ $p = 0.065$, $r = -0.18$ $p = 0.058$, respectively) and is accompanied by an average negative correlations correlation, denoted by the strongest androgenic Hormones with the Hirsutic Number ($R = -0.33$ $p = 0.05$).

Result (s): After 8 weeks of therapy, the following indicators were obtained: vit. D in the group with PCOS 70,75 $\hat{\pm}$ 4,16, the Karo index 0,85 $\hat{\pm}$ 0,04, HOMA 1,58 $\hat{\pm}$ 0,13, Ttotal 1,58 $\hat{\pm}$ 0,07, DGT 175,5 $\hat{\pm}$ 6,55, Which practically does not differ from that of women in the control group.

Conclusion: the addition of vitamin D and myoinositol has a positive effect on carbohydrate metabolism in women with PCOS and can be used in alternative therapies.

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