

2nd World Congress on

Polycystic Ovarian Syndrome

October 05-07, 2016 Orlando, Florida, USA

Amlodipine effect on pre-ovulatory follicle blood flow among women with polycystic ovarian syndrome: Randomized controlled trial

Doaa Abdelmageed El Faham
National Research Centre, Egypt

Aim: A reduction in intra-ovarian vascular resistance is necessary to achieve pregnancy in a natural cycle. The aim of this RCT was to detect whether a vasodilator calcium channel blocker like amlodipine could increase the pre-ovulatory follicular blood flow and enhance follicular maturation in women with PCOS and thus improve ovulatory outcome, which might give a better chance of conception.

Patients & Methodology: 30 women received induction by clomiphene citrate (CC) were given amlodipine (amlodipine group) compared to the other 30 women who were given placebo instead of amlodipine. The pattern of pre-ovulatory follicle blood flow was studied by color and power Doppler ultrasonography pre and post drug administration on two consecutive cycles.

Results: During the second cycles, the mean value of pulsatility index was lower but it didn't reach statistical significance, the mean value of resistant index of ovarian arteries was significantly lower (1.34 ± 0.87 vs. 1.58 ± 1.10 , 0.61 ± 0.17 vs. 0.74 ± 0.18 , respectively) in women of the amlodipine group when compared to those of the placebo group, respectively. At least one sonographically detectable mature follicle (≥ 18 mm) was observed in 54.5% (36/66) during the first cycle. At the second cycle, this proportion significantly rose to 86.7% (26/30) in the amlodipine group, but marginally and non-significantly to 56.7% (17/30) in the placebo group.

Conclusion: Calcium channel blocker amlodipine is a promising drug that improves ovarian blood flow which we believe that it may increase the women's chance of conception.

drdody_as@hotmail.com

The genetic aspect of prevalence and phenotypic expression of polycystic ovarian syndrome

Dimitrios Jim Belegiris^{1, 2, 3}

¹University of Patras Medical School, Greece

²IASO, General Maternity and Gynecology Clinic, Greece

³Metropolitan Hospital, Greece

Polycystic ovarian syndrome was first described in 1935, but according to scientific observations it well may be an ancient disorder arising from ancestral gene variants maintained from the Paleolithic period. In modern era, there are several studies that highlight noted differences in the prevalence of the syndrome among ethnic groups. Furthermore, PCOS is a family affair. Male and female relatives and descendants of women with PCOS have been found to have a higher risk for exhibiting the hyper androgenic or metabolic characteristics of the disorder. Recently investigators from Northwestern medicine have managed to identify two new genetic susceptibility regions that appear to be unique to European women with PCOS, as well as one region also present in Chinese women with PCOS. It is remarkable that these new regions contain the gene for FSH and this indicates that the regulation of this pathway plays a significant role in the development of PCOS. Combination of knowledge and scientific observations and further research may enhance our understanding of the etiology of the polycystic ovarian syndrome, and facilitate the management of this condition. Moreover, due to the variation of the phenotypic expression of the syndrome, each patient has to be evaluated individually. A challenge remains the management of sub-fertility in women with PCOS. The Thessaloniki ESHRE/ASRM sponsored PCOS Consensus Workshop group proposed the value of gonadotropin therapy in women with anovulatory PCOS that may lead 70-90% of the occasions in ovulatory cycles and a conception rate of 15-20% respectively.

dimitriosjb@gmail.com