

590: HUMAN GROWTH HORMONE COUPLED WITH THE CMAP ACUPUNCTURE PROTOCOL (GH-CMAP) ENHANCES BLASTOCYST FORMATION AND CLINICAL PREGNANCY RATES

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Objective

The aim of this study was to evaluate supplemental HGH both before and during ovarian stimulation coupled with the Cridennda Magarelli Acupuncture Protocol (CMAP) (GH-CMAP Protocol) in terms of oocyte retrieved, oocyte maturity, blast formation, and clinical pregnancy rates.

Design

This is a preliminary, prospective cohort study conducted in 2018 on 112 patients, including GH-CMAP (48) vs. antagonist protocol (A) group (64) (control).

Materials and Methods

A regular antagonist protocol with 1.6mg/day HGH was given (n=48) before and during antagonist stimulation (AS) period; 64 patients were undergoing regular AS protocol (2017-2018). The CMAP protocol (3) was used with supplemental estrace, DHEA, CoQ10. Duration of ovarian stimulation GH-CMAP averaged 10 days, the control group 11 days. Normality of all variables was evaluated and number of oocyte, oocyte maturity rate and blast formation rate were log 10 transformed to become normal distribution. Multivariate regression model (JMP version 14.0) was performed to assess the effect of GH-CMAP on number of oocytes retrieved, oocyte maturity rate and blastocyst formation rate, adjusted by independent variables including age, AMH, BMI, FSH. Total number of patients N=112; GH-CMAP group n=48; Antagonist group n=64;

Results

Co-stimulation with HGH in the GH-CMAP protocol improved blast formation rate (GH-CMAP 1.75 ± 0.05 , A 1.59 ± 0.03 ; $p=0.0252$). Pregnancy rates trended higher in GH-CMAP group (58.8%) than in the AS protocol group (46.6%). Fewer number of oocytes retrieved (GH-CMAP 9; A13; $p=0.0095$) and lower oocyte maturity rate ($p=0.1397$) was observed in GH-CMAP group by design. There was a statistically significant association between BMI and blastocyst formation rate in that the higher BMI, the lower blastocyst formation rate ($p=0.0085$).

Conclusions

These data provide evidence that the positive effect of GH-CMAP on blast formation, consequently, improve clinical pregnancy rate. The implantation rate and live birth rate are needed to be included in the further study. These results need to be confirmed by a large-scale randomized controlled trial.

Support

None

Disclosure

None