P135. Age of subfertile women and clinical pregnancy outcome following Assisted Reproduction Technologies

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Background: It is common knowledge that fertility in women declines as they become older. Due to social, economic and personal reasons, they tend to start their family planning at an older age, thus leading many of them to undergo Assisted Reproduction Techniques.

Objective: To evaluate the current population sample and validate the relationship of age of the woman with clinical pregnancy in an IVF setting.

Methods: A retrospective analysis was performed on a study population of 391 women undergoing IVF in the Assisted Reproduction Unit of Attikon University Hospital during the period from July 2010 to February 2017. For the population included, mean age was 35.1±3.6 years (min=24, max=40), including follow-up data on the respective clinical outcomes examined here. Subgroup analysis was performed for the age groups of 23-35 years and 36-40 years during the ART cycle. The statistical analysis was performed by programming in SAS 9.3 for Windows (SAS Institute Inc. NC, USA), SPSS for Windows and Microsoft Excel that was used for data storage and preprocessing.

Participants: 391 subfertile women undergoing 391 IVF cycles were included in this study (age 36 – 40).

Interventions: Age of subfertile women as a single prognostic factor for the prediction of clinical pregnancy outcomes in women who underwent Assisted Reproduction Technologies (ART).

Main Outcome Measure: Clinical pregnancy as confirmed by ultrasonography of at least one embryonic sac and fetus with a discernible heartbeat.

Results: The preliminary analysis presented here demonstrates that women with clinical pregnancy had statistically significantly lower age (about 1 year) than women with no pregnancy (t-test t= 1.98 years, p<.05). In 30.94% of the cases, the age group of ?35 years had a clinical pregnancy, in contrast to only 19.52% of the women with age 36-40 (p<0.05). A logistic regression using the woman age was performed had a rather small concordance level 53.9%, however, proved that women of higher age had more than the half probability for clinical pregnancy and that the accuracy of the prediction has tighter confidence limits than in younger women.

Conclusion: Concerning the findings of the current analysis and as anticipated from previous reports, the age of the woman at the IVF attempt plays a critical role in achieving clinical pregnancy, especially at the age group of 36-40 years.

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