

IS IT POSSIBLE TO PREDICT THE RESULT OF IN VITRO FERTILISATION IN ADVANCED MATERNAL AGE?

Rybina, Anastassiya¹; Lokshin, Vyacheslav²; Karibayeva, Sholpan³; Valiev, Ravil⁴; Khoroshilova, Irina⁵; Malik, Aldiyar⁶

¹Анастасия Рыбина, ²Vyacheslav Lokshin, ³Sholpan Karibayeva, ⁴Ravil Valiev, ⁵Irina Khoroshilova,

⁶Aldiyar Malik

Abstract: Currently, various methods are used to increase pregnancy rate in advanced maternal age, for example, preimplantation genetic screening (PGS). There is no unequivocal opinion on the effectiveness of PGS. There are more questions than answers. The aim: identify the effectiveness of in vitro fertilization programs using aCGH in patients with ≥ 38 years of age, depending on the age of the woman. **Materials and methods** This is a retrospective cohort study at ICCR PERSONA of patients who underwent in vitro fertilization with PGS from January 2017 to June 2018. The 1st group - ART using a CGH method ($n = 101$), and the 2nd – IVF without PGS ($n = 484$). For statistical processing of the data, the χ^2 -square and correlation using EpilInfoTM were used. **Results:** Patients of both groups were divided into 10 age groups: 38-46 and 47 years. All cycles with own oocytes were included. Stimulation of superovulation was performed using standard protocols. The correlation of the maternal age with the pregnancy rate in the control group was a strong negative ($r = -0.83$), which was not observed in the 1st group $r = 0.15$. There were no significant differences between groups in the pregnancy rate for the beginning of the cycle, $p > 0.05$. But there were significant differences between groups in the pregnancy rate for the transfer, $p < 0.01$. **Conclusions:** The effectiveness of the use of aCGH in women of older reproductive age remains an open question. It is necessary to develop indications for PGS in women of advanced reproductive age, taking into account the number and quality of the embryos, the features of the genetic anamnesis and the expectations of the patient.