The number of retrieved oocyte is not necessarily an indicator of embryo quality in aged women

Hiroko Yamauchi Yoshiharu Nakaoka Shizuka Kitayama Kayo Takahashi Kanako Katsu Takao Himeno Keijirou Itou Yoshiharu Morimoto

(Introduction)

Single embryo transfer is recommended to avoid possible complications associated with multiple pregnancies. On the other hand, the developmental potential of oocytes decreases with maternal age possibly due to an increase of chromosomal abnormality. In this study, we assessed the relationship between the number of retrieved oocytes and the resultant embryo quality in advanced age women.

(Material & Methods)

A total of 386 cycles that were older than 41 years and underwent fresh embryo transfer from January 2011 to December 2013 was included in the analysis.

Patients were retrospectively divided into five groups according to the number of retrieved oocytes as follows: 1, 2-5, 6-10, 11-15, and \geq 16.

We analyzed the relationship between the number of retrieved oocytes and the outcome including implantation and live birth rates.

(Results)

In groups with the number of oocytes retrieved of 1, 2-5, 6-10, 11-15, and \geq 16, the implantation rates were 2.6% (1/39), 10.4% (14/134), 9.9% (13/131), 11.8% (8/68) and 7.1% (1/14) respectively.

The live birth rates were 2.6% (1/39), 5.2% (7/13), 6.1% (8/131), 2.9% (2/68) and 7.1% (1/14) respectively . No significant differences were observed among all groups.

(Conclusion)

In women who were 41 or older, both the implantation and the live birth rates per transferred embryo were very low and almost the same in spite of the number of retrieved oocytes. These data suggest that double embryo transfer might be recommended for aged women even in her first embryo transfer.