総会記事

第187回東京医科大学医学会総会

日 時: 2021年6月19日(土)12時00分~

開催:ウェビナー開催

当番分野: 救急災害医学分野、臨床検査医学分野

ポスター発表(Zoom 開催): 1-1~1-7、2-1~2-5、3-1~3-7、4-1~4-7、5-1~5-3、6-1~6-5、7-1~7-4、8-1~8-3

1-1.

Does Assisted Reproductive technology affect the morbidity of Autism Spectrum Disorders among in children?

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[Purpose] In recent years, the effects of assisted reproductive technology (ART) centered on in vitro fertilization on children have been of interest all over the world, but the effects on psychomotor development have not been elucidated in many respects.

The Autism Spectrum Disorder (AQ) is not only useful for diagnosing whether a child has autism disorder, but is also a continuous form of autism from healthy individuals to overt autism. Based on the spectrum hypothesis that there is, it is said that individual differences in autism tendencies in general healthy people can also be measured.

Therefore, in this study, we conducted a developmental survey of ART-derived children in Japan using AQ.

[Method] After obtaining written consent, a 50-question questionnaire was sent to the parents of the ART-derived child born in Japan in 2008 and the

naturally pregnant child born at the same time. The survey was conducted by filling in the answers to questions related to sociality and communication.

The difference in the mean values of each group was examined by the f-test, and the difference when natural pregnancy was used as a control by the t-test (Dunnett) (significance level p < 0.05).

[Results] The number of valid responses (number of children) was 423 for fresh embryo transfer, 502 for frozen embryo transfer, and 195 for spontaneous pregnancy.

The average, minimum, and maximum AQ values for each group were 15.8 (2-44), 15.4 (2-39), and 13.8 (0-39), respectively. Both showed higher AQ values than those derived from spontaneous pregnancy, and this difference was maintained even after adjusting for the difference between boys and girls.

[Conclusion] ART-derived babies showed higher AQ values than spontaneous-pregnancy-derived babies, but the number of babies considered clinically ASD did not increase.

However, in ART, artificial manipulation overlaps with the epigenome formation period, so it will be necessary to carefully assess the adaptation of ART in the future.