

# Embryo-screening project may reduce IVF miscarriages

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The Japan Society of Obstetrics and Gynecology has announced the launch of clinical research aimed at preventing miscarriages by genetically screening eggs that are fertilized in vitro before implanted in the womb.

Preimplantation genetic screening of embryos is aimed at detecting potential abnormalities in chromosomes.

The group intends to examine whether selecting for lack of abnormalities can lower the miscarriage rate.

But the research is raising ethical questions because PGS detects not only chromosomal abnormalities that can complicate pregnancy and delivery, but also conditions that are not life-threatening to the mother, such as Down's syndrome.

If the effectiveness of PGS is confirmed, the medical society will seek a public debate on whether it should be approved as a medical treatment.

Participating will be 100 women between 35 and 42. Half will be those who have undergone in vitro fertilization at least three times without becoming pregnant. The remainder will be those who have miscarried after IVF treatment at least twice.

The two groups will be each compared with 40 women who will not undergo PGS. The results will allow the society to decide on the scope for full-scale research.

The society began provisionally registering women for the project last month. It will use a method called array comparative genomic hybridization, an invasive procedure that analyzes all chromosomes in an embryo to find abnormalities.

Four institutions, including Nagoya City University, will be in charge of IVF, while Tokyo Women's Medical University and two other institutions will do the gene analysis. Others may join the project.

The society has so far approved the screening of fertilized eggs for abnormalities in certain chromosomes only in cases where either partner has a serious genetic illness. In February 2015, it approved implementation of PGS clinical research.

<http://www.japantimes.co.jp/news/2017/02/16/national/science-health/embryo-screening-project-may-reduce-ivf-miscarriages/>