Japan panel OKs gene editing of human eggs for basic study

April 23, 2016 (Mainichi Japan)

TOKYO (Kyodo) -- A bioethics panel of the Japanese government on Friday approved gene modifications of fertilized human eggs for basic research purposes, while rejecting the technology's clinical use due partly to the unknown impact on the next generation.

Studies on so-called genome editing are under way to use it for animals, plants and human body cells, but whether the technology should be applicable to fertilized human eggs is being debated worldwide after Chinese scientists reported gene editing of human embryos last year, in what was believed to be the world's first such case.

The government panel concluded that researchers can use modified fertilized human eggs to find out which genes play an important role in the early phase of growth, to develop treatment for congenital diseases and to improve technologies linked to reproduction.

But it added there is a need to consider whether the studies are impossible to conduct without using such fertilized human eggs.

Ethical problems also remain when gene editing is used for other than medical treatment, such as eye colors or strengthening muscles, the panel said.

The panel said it cannot approve the clinical use of modified fertilized human eggs, citing risks of editing errors and the currently unknown impact on offspring. Correcting genetic defects and putting the egg back into a mother's womb is among the cases of clinical use.

http://mainichi.jp/english/articles/20160423/p2g/00m/0dm/002000c

http://www.japantimes.co.jp/news/2016/04/22/national/science-health/japan-panel-gree nlights-gene-editing-of-human-eggs-for-basic-study/

10 Comments

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sensei258 Apr. 25, 2016 - 05:42 AM JST

A bioethics panel of the Japanese government has approved gene modifications of fertilized human eggs for basic research purposes

So it's okay to experiment on unborn children, as long as they're still just a tiny blob of cells and not a cute little baby?



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garymalmgrenApr. 25, 2016 - 07:17AM JST

just a tiny blob of cells

That is exactly what they are.

researchers can use modified fertilized human eggs

These eggs are unviable and could never become \boldsymbol{a} cute little \boldsymbol{baby} .

They not unborn children just as a piece or iron ore is not a Ferrarri.



2

kobejimApr. 25, 2016 - 08:04AM JST

Gary, equating anything that is alive to inanimate objects is incongruent. This is the beginning of the end for natural humans but i guess it has been inevitable for a long time. if you don't mind this, ok. But please don't lie to yourself on what is happening



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Disillusioned Apr. 25, 2016 - 08:17AM JST

Correcting genetic defects and putting the egg back into a mother's womb is among the cases of clinical use.

Um, this doesn't sound like a blob of cells! As much as there are huge ethical issues with tampering with fertilized human eggs, I think this step in gene manipulation was inevitable. Let's just hope it is used to repair genetic disorders and not to create 'designer babies'. Or, to create super humans for soldiers. Or, to create brain-dead drone workers, maybe they already have achieved this one.



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These eggs are unviable

At the time the egg is fertilized, it would have to have been viable or that couldn't have taken place.

and could never become a cute little baby.

That part is true, because they are killed for the sake of scientific study



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katsu78Apr. 25, 2016 - 09:26AM JST

DisillusionedAPR. 25, 2016 - 08:17AM JST Correcting genetic defects and putting the egg back into a mother's womb is among the cases of clinical use. Um, this doesn't sound like a blob of cells!

Yes. Which is why it is in a different category from the kind of experiments the panel approved. It's still banned.

Or, to create super humans for soldiers.

Why would it be used to create super soldiers? Super soldiers make great comic book fodder, but compare the cost and difficulty of genetic experimentation + raising the results for 18 years + finding something for them to do while they're not fighting in the war you don't even know if we'll have by the time they're ready to fight, to a drone we already understand and have the technology for.

designer babies

This is a pretty reasonable concern. The rich and fashionable have shown repeatedly they have no qualms manipulating their children for their own aesthetic enjoyment, and cultures around the

world have strong ideas about what children should look like. The fact that we can't control how our genes create our looks has been pretty much the only think forcing people to look at each other non-superficially. Take that away and...

Not to mention that genetic diversity of any population is an important way to ensure it's survival against unknown future duress. If we start taking away genes because they don't look right to our sense of fashion, and we start reducing our range of genetic diversity.



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Utrack Apr. 25, 2016 - 10:46AM JST

I think it is because of the rise in inconvenient babies being Born in Fukushima.. The contamination in the food is giving rise to abnormalities in unborn children.

https://www.youtube.com/watch?v=DAc8K_to1Vc&feature=youtu.be



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SenseNotSoCommonApr. 25, 2016 - 10:48AM JST

approved gene modifications of fertilized human eggs for basic research purposes, while rejecting the technology's clinical use

Middle ground = muddled grounds.



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MarkGApr. 25, 2016 - 10:56AM JST

Dangerous ground to me. Genetically remapping an embryo is not natural. I do believe nature will always prevail...or low ayes have believed.



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Citizen2012Apr. 25, 2016 - 11:35AM JST

find out which genes play an important role in the early phase of growth,

Japan combine, medical doctors that do not need to swear The Hippocratic Oath, J-INC will full power and basically no law enforcement on corporate crimes, this OK is an open door to a new disaster to come. Also only naive can think they will study early phase of growth and which gene are giving blue eyes without testing on living embryo to confirm the data.

http://www.japantoday.com/category/national/view/panel-oks-gene-editing-of-human-eggs-for-basic-study