England debates legalizing in vitro technique giving baby DNA of three parents

by <u>Trevor Grundy</u> in the <u>March 4, 2015</u> issue

England could become the first country to allow the creation of human embryos from the DNA of three people to try to eradicate a type of genetic disease that has caused the deaths of thousands of babies.

"This is world-leading science within a highly respected regulatory regime, and for the many families affected, this is light at the end of a very dark tunnel," said Jane Ellison, health minister.

Prime Minister David Cameron voted in favor of the technique when members of Parliament approved it February 3, which has provoked fierce ethical debate in Britain and elsewhere. Senior church figures called for the procedure to be blocked.

But with approval from the House of Lords, Britain's upper chamber, which is expected, the first three-person baby could be born as soon as next year.

The technique could help women in England who have lost babies to mitochondrial disease.

Mitochondria are tiny compartments inside nearly every cell of the body that convert food into usable energy. They have their own DNA which does not affect characteristics such as appearance.

Defective mitochondria is a condition that is passed down only from the mother and leads to brain damage, muscle wasting, heart failure, and blindness. The controversial new technique uses a modified version of in vitro fertilization—the process by which eggs are removed from ovaries and mixed with sperm in a laboratory dish—to combine the DNA of the two parents with the healthy mitochondria of a donor woman. The technique has been dubbed the three-parent baby technique by the media.

The Catholic and Anglican churches in England raised concerns about whether the procedure is safe or ethical, not least because one method involves the destruction of embryos.

"The human embryo is a new human life, and it should be respected and protected from the moment of conception," said Catholic bishop John Sherrington. "This is a very serious step which Parliament should not rush into taking."

Brendan McCarthy, the Church of England's adviser on medical ethics, told the BBC, "We need to be absolutely clear that the techniques that will be used will be safe, and we need to be absolutely sure that they will work."

He said the ethics of the issues should be properly discussed.

Anglican bishop Lee Rayfield of Swindon said the procedure was a "massive step," and some of his colleagues were concerned about how it was going to be regulated once it was approved.

"If the safeguards are there," he said, "the Church of England will be behind this."

Sharon Bernardi of Sunderland, who has lost seven children, supports the new move.

"I would ask the Church of England desperately to please look at the bigger picture and look at the children who have been affected by this dreadful disease," she said.

About one in every 6,500 babies is born with mitochondrial disease, which can be fatal. —Religion News Service

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