



## 'Three-person' baby boy born in Greece

By James Gallagher Health and science correspondent, BBC News  
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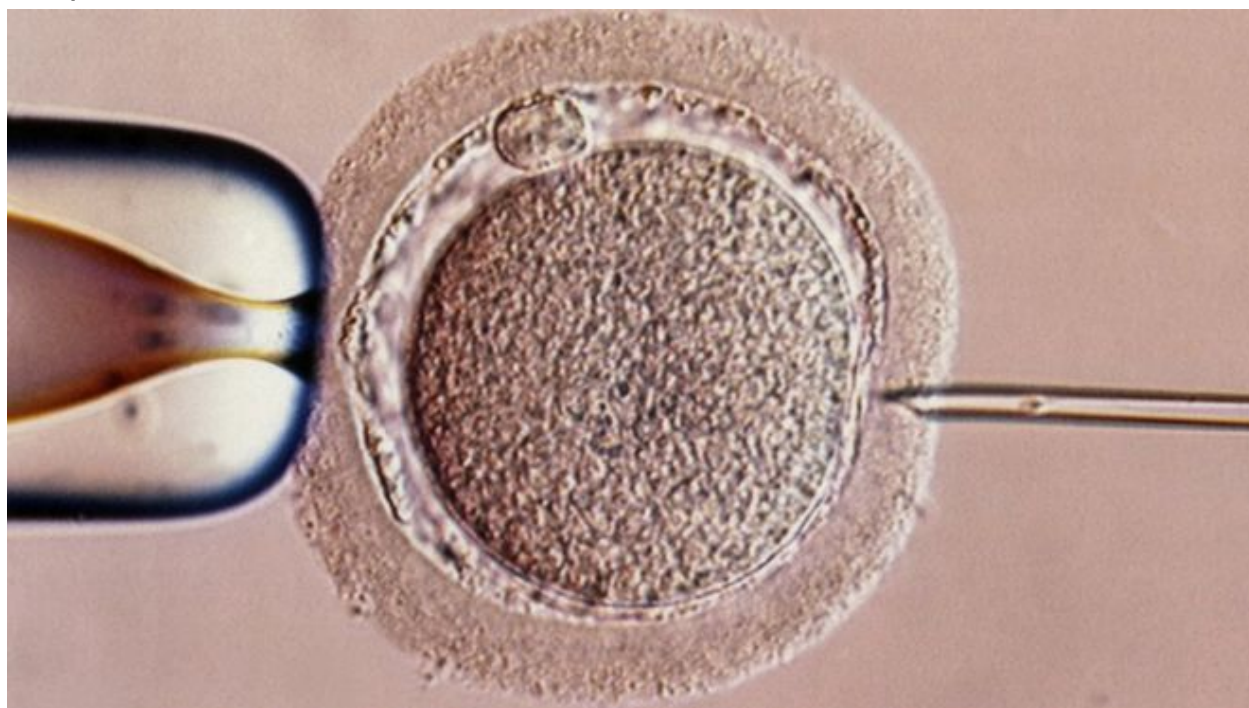


Image: The baby was conceived using an experimental form of IVF

The baby boy was born weighing 2.9kg (6lbs) on Tuesday. The mother and child are said to be in good health.

The doctors say they are "making medical history" which could help infertile couples around the world.

But some experts in the UK say the procedure raises ethical questions and should not have taken place.

The experimental form of IVF uses an egg from the mother, sperm from the father, and another egg from a donor woman.

It was developed to help families affected by deadly mitochondrial diseases which are passed down from mother to baby.

It has been tried in only one such case - a family from Jordan - and that provoked much controversy.

But some fertility doctors believe the technology could increase the odds of IVF too.

This is all about mitochondria - they are the tiny compartments inside nearly every cell of the body that convert food into useable energy.

They are defective in mitochondrial diseases so combining the mother's DNA with a donor's mitochondria could prevent disease.

But there is also speculation mitochondria may have a role in a successful pregnancy too. That claim has not been tested.

The patient was a 32-year-old woman in Greece who had endured four unsuccessful cycles of IVF.

She is now a mother, but her son has a tiny amount of his genetic makeup from the donor woman as mitochondria have their own DNA.

Dr Panagiotis Psathas, president of the Institute of Life in Athens, said: "A woman's inalienable right to become a mother with her own genetic material became a reality.

"We are very proud to announce an international innovation in assisted reproduction, and we are now in a position to make it possible for women with multiple IVF failures or rare mitochondrial genetic diseases to have a healthy child."

The Greek team were working with the Spanish centre Embryotools, which has announced that **24 other women are taking part in the trial** and eight embryos are ready to be implanted.

In February 2018, the doctors in Newcastle who pioneered the technology were given permission to create the UK's first three-person babies.

The fertility regulator approved two attempts, both in families with rare mitochondrial diseases.

Some doctors in the UK argued the two applications - fertility and disease prevention - are morally very different.

Tim Child, from the University of Oxford and the medical director of The Fertility Partnership, said: "I'm concerned that there's no proven need for the patient to have her genetic material removed from her eggs and transferred into the eggs of a donor.

"The risks of the technique aren't entirely known, though may be considered acceptable if being used to treat mitochondrial disease, but not in this situation.

"The patient may have conceived even if a further standard IVF cycle had been used."

Dr Beth Thompson, from the Wellcome Trust, said: "UK regulation was based on strong public engagement and scientific evidence and allows the risks and benefits to be carefully weighed up.

"We're proud to be supporting the first UK study into the use of mitochondria donation techniques in a well regulated environment, but we're concerned about studies taken place without similar levels of oversight."