In the news

SELECTING FOR SUSCEPTIBILITY

A slippery slope to designer babies or hope for a family afflicted with a history of breast cancer? The birth in the UK of the first *in vitro* fertilized baby screened for a cancer-associated genetic mutation was sure to provoke a storm of comment.

Pre-implantation genetic diagnosis, previously used to screen for diseases such as cystic fibrosis and Huntington's disease, allowed selection of an embryo that did not carry the inherited *BRCA1* mutation. The UK Human Fertilisation and Embryology Authority agreed in 2006 that this technique could be used for susceptibility genes, and the parents and doctors hoped to lessen the risk of developing breast cancer, which has afflicted all female members of the father's family.

"We have shown for the first time that this technique can be applied to stop the devastating cycle of this disease in families," said Dr Paul Serhal, who led the team that treated the couple at University College London (Telegraph 9 Jan 2009). "The lasting legacy is the eradication of the transmission of this form of cancer that has blighted these families for generations" (Guardian 9 Jan 2009). Nevertheless, there was concern in other quarters about this case, with critics stating that inheritance of the faulty gene is not a death sentence and that the daughter could still develop breast cancer. Josephine Quintavalle, of the campaign group Comment on Reproductive Ethics, said, "This testing procedure is being used more and more for less and less significant reasons" (BBC News 9 Jan 2009).

However, strict regulation and the complexity and expense of the procedure suggest it is far from becoming commonplace. As Dr Sarah Cant of Breakthrough Breast Cancer said: "The decision ... is a complex and very personal issue. It's important for anyone affected to have appropriate information and support so they can make the right choice for them" (Guardian 9 Jan 2009).

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