

## ABC-7 News

### Made-to-Order Babies

May 4, 2004 — Chicago scientists are using a technique to create human babies with the potential to help their ailing siblings. For the parents of a child desperately in need of a bone marrow transplant, the latest research in the "Journal Of The American Medical Association" may reinforce the use of a controversial life saving option.

Scientists at the "Reproductive Genetics Institute" in Chicago say they have created five healthy babies that will be perfect matches as stem cells donors for their brothers or sisters.

You may recall the story of Molly Nash and her brother, Adam. She was suffering from a rare disease that would eventually kill her without a bone marrow transplant. Adam was created to save her life.

Through a process called pre-implantation genetic analysis or PGD Chicago scientists screened embryos created by the Nash parents. They found the ones that were disease free and the same tissue type as Molly. The best was implanted in the mother's womb. When Adam was born, healthy cells from his discarded umbilical cord were transplanted into Molly. Both are healthy and thriving.

"The parents have the potential for creating babies who have that same genetic match and that is called HLA typing," said Dr. Randy Morris, Reproductive Endocrinologist.

The same scientists who helped create Adam are now reporting success in creating more babies who are genetic bone marrow matches for their siblings. Those siblings are suffering from either leukemia or a rare form of anemia. Of the nine couples in the JAMA study --five became pregnant. The babies are the desired matches.

"It's extremely significant because these couples had the chance to save their sick babies," said Lana Rechitsky, Ph.D., Geneticist, Reproductive Genetics Institute.

Right now PGD gives parents some control over what genes their offspring will have. Critics say it creates many ethical dilemmas. They not only question the future of unused embryos but say the expanded use of PGD is another step down the path toward "designer babies". The fertility industry is largely unregulated and some doctors say parents deserve the right to make their own reproductive choices.

"Looking at couples who say, 'If we could have another baby and have that baby cure our first child of that disease why wouldn't we want to do that? Why wouldn't anyone want to do that?' And of course that is something I completely agree with," said Morris.

The parents in this latest study did not want to be identified. Several have chosen to freeze the stem cells for possible future use. But, researchers say at least one baby's stem cells have been given to his or her ailing sibling and the procedure was considered a success.