

A Kidney for Katie

Katie Dyd was an active, playful and energetic little girl. She was always running about, climbing trees, or gathering all of the neighborhood children to play team sports or run races in the yards up and down the street. Katie had a zest for life and actively pursued it.

Mysteriously, Katie began to feel run down, tired and sick overall. After extensive medical tests and many trips to the doctor, it was determined that her kidneys were failing and that she would need a transplant.

Day after day the Dyds watched helplessly as Katie's health faded away and her condition became critical. Although Katie was immediately placed on the transplant list, they were told that it could be years until she received a donated kidney. There were simply too many other people on the list and a very limited supply of donated organs. The Dyds mounted a desperate search to find a medical professional or scientist that could tell them something different or offer an alternative to a donated transplant. Their one ray of hope came in the form of a controversial technique that would involve therapeutic human cloning to create embryonic stem cells for use in growing a replacement organ.



Stem cells are “blank” cells that can differentiate to form any type of cell in the body. In Katie's case, stem cells would be stimulated to differentiate into the cells that create kidney tissue. The differentiated cells would be grown in a carefully controlled and sterile environment until the tissue formed a complete kidney. The kidney would then be transplanted into Katie's body. Researchers have told the Dyds that the success rate for organs grown from embryonic stem cells is higher than with any other type of cell. The transplant is even more successful if the embryonic stem cells used are an exact genetic match to the recipient. To achieve this, the doctors would use one of Katie's somatic cells to produce an embryonic clone from which the stem cells would be harvested.

Because this is such a controversial technique, this form of treatment must first be approved by the Hospital's Ethics Committee before the team of scientists and medical professionals can begin.

Is this a case where human cloning should be allowed? Consider this question from one or more of the following viewpoints.

- 1) A medical professional
- 2) A scientist
- 3) A representative from a national organ transplant association
- 4) The chief administrator of a major hospital
- 5) A community member
- 6) A transplant recipient