

Leukaemia boy saved — by baby sister

Couple conceives baby, so her umbilical cord blood can be used to treat dying son. Eighteen months later, he is well

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TO GIVE their gravely ill son a chance at life, a couple here

conceived a second child to save him.

Little Rachel Foo's umbilical cord blood proved a lifeline to her brother, three-year-old Ryan, who received

an infusion of her stem cells after other treatment efforts had failed.

That was 18 months ago.

Now five, Ryan has started kindergarten and his leukaemia is in remission, said the biotech company CyGenics yesterday, which operates CordLife, a private cord-blood bank here that processed and stored the blood.

A CordLife spokesman

said they announced the transplant only now, because they wanted to be sure the cancer was in remission.

Late in 2001, doctors had given Ryan only a 10-per-cent chance of recovery, unless he had a bone-marrow transplant. Neither of his parents were a match, and as an only child, Ryan had a one in 20,000 chance of finding a non-related donor.

An appeal through The Straits Times in Dec 2001 saw hundreds of donors come forward, said Ryan's grateful father, Mr S Y Foo, 35, but none was suitable.

When the Fooks heard about how cord blood had been used to treat various blood-related ailments, they made up their minds to have a second child to help Ryan. Cord blood is a rich source

of what doctors call haematopoietic stem cells, "blank" immature cells that can become all sorts of blood cells: red, white or platelets.

These can then replace diseased cells in patients who suffer from leukaemia or severe anaemia, for example.

"We were elated when Rachel's blood was shown to be a 100-per-cent match for Ryan," said Dr Tan Ah Moy,

head and senior consultant for haematology and oncology services at the KK Women's and Children's Hospital, where the transplant was performed.

The perfect match meant the transplant would have a higher chance of success.

She said: "The healthy cells from his sister re-populated in his bone marrow and revived his immune system, depleted by the chemotherapy and radiotherapy used to treat the leukaemia."

The first successful cord-blood stem-cell transplant was done in France in 1988, to help a boy with a serious form of anaemia.

Here, the public Singapore Cord Blood Bank, where babies' umbilical cord blood will be processed, frozen and stored, aims to set up its facilities and start freeze-storing cord blood by the last quarter of this year. It plans to build a registry of at least 10,000 samples, to help about 100 patients a year suffering from blood disorders.

Currently, over 2,500 people have stored umbilical cord blood in two private banks here, in case they or family members have need of it in the future. Only a handful have needed to use it so far for blood-related illnesses.

Donors can be charged several thousand dollars for extraction, tests and storage.

As for Ryan, who has just started kindergarten, he is doing well now, said Mr Foo, an engineer. His mother, Wendy, 34, is a part-time accounting and clerical worker.

Although the disease cost him his sight in one eye, and he has trouble concentrating, it is nothing compared to the dark days when his life hung in the balance, Mr Foo said.

"We're still living day by day, and there's no guarantee he won't have a relapse. But our main aim is to make sure Ryan's happy, and nowadays we can more or less enjoy normal family life."

Article Highlights:

- **Ryan Foo; 3 years old. Diagnosed with acute lymphoblastic leukemia (ALL).**
- **Transplanted with younger sister's umbilical cord blood stored with CordLife.**
- **18 months later: Leukemia in remission and Ryan has since started school.**

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