

Twin undergoes revolutionary brain injury treatment

An Auckland twin who was brain-damaged at birth has become the first New Zealander to undergo experimental treatment in the United States, using her own umbilical cord blood.

Three months ago, Maia Friedlander, 4, was locked in her own world. Despite six hours of therapy a day for three years, Maia - who was born six weeks premature - struggled to talk, walk properly or even chew her food without choking.

While her twin sister, Ariel, hit all her developmental milestones about six months early, Maia did not learn to crawl till she was three.

"Our lives revolved around her therapy regime but we couldn't see much improvement," her father, Daniel, said.

The breakthrough came in February when they met American mother Mary Schneider, whose son, Ryan, was the first to undergo cord blood transfusion for his brain injury at Duke University, North Carolina. Five years on, he is developmentally normal.

More than 50 other children with brain injuries have since been treated through Duke's reinfusion programme.

In August, Maia and her mother, Jillian, travelled to the US, where she received a two-hour infusion of her own cord blood, stored by her parents at birth.

Within days, her concentration and coordination improved. Maia now goes to kindergarten five days a week.

"She's like a different child - talking, hugging us, playing ... She's had a second chance at life and we can now have the family life we'd always dreamed of."

Five other Kiwi families are considering sending children to Duke.

Mr Friedlander said the cost - about \$50,000, plus \$5000 for banking cord blood - was beyond most people's reach. "We would like to see the reinfusion procedure available to families here."

However, Joanne Kurtzberg, the head of Duke's programme, cautions against seeing the treatment as a cure just yet.

STEM CELL TREATMENT: Umbilical cord blood - collected at birth - contains stem cells, which have the potential to become any kind of cell. Because they are an exact match to the person they are collected from, they are used to "reboot" immune systems after cancer treatment. Experimental treatments are also using stem cells to treat a range of inherited disorders, type-1 diabetes and brain injuries. Maia's Cord Blood Miracle can be viewed on dompost.co.nz