

BEIKE BIOTECHNOLOGY

Patient Case Study

Cerebral Palsy

Female, 2 years, March - April 2012

Summary

Diagnosis	Sex	Age	Nationality
Cerebral Palsy	Female	2 years	Argentina
Injections	Cell type	Admission date	Discharge date
7	UCBSC	March 3rd 2012	April 1st 2012

Condition On Admission

The patient was born with encephalopathy and had speech and movement development delays. The patient could not speak, sit, or walk upon admission to the hospital. She could move her limbs, but without any control. Muscle tone in both arms and legs was high.

Treatment Schedule

The patient received 7 umbilical cord blood-derived stem cell (UCBSC) packets by intravenous (IV) and intrathecal injections as per schedule below:

Number	Date	Cell Type	Delivery Method	Side Effects
1	2012-03-05	UCBSC	Intravenous Injection	none reported
2	2012-03-07	UCBSC	Intrathecal Injection	none reported
3	2012-03-12	UCBSC	Intrathecal Injection	none reported

Number	Date	Cell Type	Delivery Method	Side Effects
4	2012-03-16	UCBSC	Intrathecal Injection	none reported
5	2012-03-21	UCBSC	Intrathecal Injection	none reported
6	2012-03-23	UCBSC	Intravenous Injection	none reported
7	2012-03-28	UCBSC	Intrathecal Injection	none reported

Condition at discharge

The patient had no fever, headaches, or other side effects after transplantation of the stem cells. The doctors reported that the spasticity in her limbs had decreased, the movement of her right arm had become more controlled and flexible, and she had better overall body balance.

Condition 3 months after treatment

The patient's parents completed the follow-up survey three months after the treatment; they commented that their daughter was now much more active and she had shown a big development in her speech. As for physical improvements, they observed that her trunk muscles had gained much more strength and she was now able to remain seated for longer periods. Her balance had also improved to the point where she was now able to stand with some support for longer periods of time. They felt their daughter's quality of life had improved since the treatment. Please see the excerpt below from her 3 month follow-up survey (filled out by the patient's parents):

Symptom	Parents' Assessment of Improvement
Trunk control	Significant improvement
Balance	Moderate improvement
Movement in general	Moderate improvement
Walking	Moderate improvement
Overall strength	Significant improvement
Limb muscle strength	Moderate improvements
Trunk muscle strength	Significant improvement
Range of movement	Moderate improvements
Fine motor control	Moderate improvements

Hand control	Moderate improvements
Speech	Significant improvement
General mental ability	Significant improvement