BEIKE BIOTECHNOLOGY

Patient Case Study

Cerebral Palsy Female, 2 years old, March 2012

Background

Age: 2 years old Sex: Female Nationality: Argentinean Date of Admission: March 3, 2012 Date of Discharge: April 1, 2012 Treatment Location: Shijiazhuang, China Diagnosis on Admission: Cerebral Palsy

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	March 5, 2012	UCBSC	IV	none reported
2	March 7, 2012	UCBSC	Intrathecal	none reported
3	March 12, 2012	UCBSC	Intrathecal	none reported
4	March 16, 2012	UCBSC	Intrathecal	none reported
5	March 21, 2012	UCBSC	Intrathecal	none reported
6	March 23, 2012	UCBSC	IV	none reported
7	March 28, 2012	UCBSC	Intrathecal	none reported

Condition On 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.

Follow Up Information

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.

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	

Please see the excerpt below from her 3 month follow-up survey (filled out by the patient's parents):

BEIKE BIOTECHNOLOGY CO., LTD.

16F Beike Building, 18 Keyuan Rd., South Area, Shenzhen Hi-Tech Industrial Park Shenzhen, China 518057 Tel: +86-755-8630-9277 Email: info@beikebiotech.com Web: