

BEIKE BIOTECHNOLOGY

Patient Case Study

Cerebral Palsy

Female, 13 years, January - February 2012

Summary

Diagnosis	Sex	Age	Nationality
Cerebral Palsy	Female	13 years	Argentina
Injections	Cell type	Admission date	Discharge date
8	UCBSC	January 18th 2012	February 18th 2012

Condition On Admission

The patient had a development delay of movement on the right side of her body since birth. During physical assessment upon her admission to the hospital she was found to be fully alert to her surroundings and her memory and perceptual functions were also normal. The muscle strength, tone, and reflexes of her left sided limbs were normal. Muscle strength of her right limbs was 4/5 and her muscle tone on that side was affected by spasticity. Tendon reflexes on the right side were present.

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
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1	2012-01-22	UCBSC	Intrathecal Injection & Intravenous Injection	headache
2	2012-02-01	UCBSC	Intravenous Injection	none reported
3	2012-02-01	UCBSC	Intravenous Injection	none reported
4	2012-02-03	UCBSC	Intrathecal Injection	none reported
5	2012-02-06	UCBSC	Intrathecal Injection	none reported
6	2012-02-11	UCBSC	Intrathecal Injection	none reported
7	2012-02-15	UCBSC	Intravenous Injection	none reported

Condition at discharge

The side effects noticed after the 2nd injection had resolved without any lasting effects by the end of the treatment. The doctors noted the patient's right arm movement had gained flexibility and her ability to control her trunk muscles had improved. The patient's parents commented that their daughter had made some good improvements at the hospital and they were hopeful for further developments in the near future.

Condition 6 months after treatment

The patient's family sent a small update about their daughter stating that she was able to speak with more fluidity and her right side was not as spastic as before the treatment.

Condition 14 months after treatment

The patient's family, in the 14 months since treatment, had observed big improvements in their daughter's quality of life and physical condition. Along with the physical improvements reported in the follow-up survey below, the family also mentioned that her intellectual and language abilities had also greatly improved. Please see an excerpt from the patient's 14 month assessment below (submitted by the patient's parents):

Symptom	Assessment of Improvement
Trunk control	Significant improvement
Balance	Significant improvement
Movement in general	Significant improvement
Walking	Significant improvement
Standing up	Moderate improvements

Spasticity	Significant improvement
Overall strength	Significant improvement
Limb muscle strength	Significant improvement
Trunk muscle strength	Significant improvement
Range of movement	Significant improvement
Hand control	Significant improvement
Speech	Significant improvement
General mental ability	Significant improvement