

BEIKE BIOTECHNOLOGY

Patient Case Study

Spina Bifida

Male, 2 years, April - May 2010

Summary

Diagnosis	Sex	Age	Nationality
Spina Bifida	Male	2 years	USA
Injections	Cell type	Admission date	Discharge date
6	UCBSC	April 13th 2010	May 13th 2010

Condition On Admission

Patient's primary concern was difficulty in walking. The muscle strength of both lower limbs was low. The sensation in both lower limbs was abnormal. The ankle joint had limited range of movement. Babinski's sign was negative. All standard pre-treatment tests such as routine bloods, urine, blood biochemistry and prothrombin examination showed no significant abnormalities. The electrocardiogram and lung x-ray showed no significant abnormality

Treatment Schedule

The patient received 6 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	2010-04-16	UCBSC	Intravenous Injection	none reported
2	2010-04-21	UCBSC	Intravenous Injection	none reported

Number	Date	Cell Type	Delivery Method	Side Effects
3	2010-04-26	UCBSC	Intravenous Injection	none reported
4	2010-04-30	UCBSC	Intravenous Injection	none reported
5	2010-05-05	UCBSC	Intravenous Injection	none reported
6	2010-05-10	UCBSC	Intrathecal Injection	none reported

Condition at discharge

The doctors noted after the stem cell treatment that there was more power and sensation in the patient's legs and his right ankle's movement was better than before. The patient's family reported moderate improvements in their child's condition.

Condition 1 month after treatment

The family reported significant improvements. The family wrote the following in the 1 month evaluation: *"He started walking independently and is now getting better everyday because he practices walking everyday. He can now turn and make stops while walking. He is working on not having his hands spread out while walking for balance. One hand is still out for balance but he got one hand down. He is able to control falling so he doesn't hit his head and slows down or speeds up while walking already. He is also having improvement in feeling his feet. He scratched the arch in his left foot. He is starting to have feeling in the bottom of his feet."*

Condition 3 months after treatment

The family was still reporting continued significant improvements at the 3 month time point. Please see their comments below: *"He continues to improve while walking with AFO's (ankle-foot orthotics) on his feet. He is better this month at balance and walking with his feet closer together. His overall strength increased since the last evaluation and his feeling in his legs is still good to his ankles"*