

BEIKE BIOTECHNOLOGY

Patient Case Study

Autism spectrum disorder (ASD)

Male, 16 years old, June 2019

Background

Age: 16 years old

Sex: Male

Nationality: British (UK)

Date of Admission: June 02, 2019

Date of Discharge: June 16, 2019

Treatment Location: Bangkok, Thailand

Diagnosis on Admission: Autism spectrum disorder (ASD)

Condition On Admission

The patient was non-verbal communication and not very cooperative with sign language or the use of Picture Exchange Communication System (PECS).

Does use both communication skills when he wants something and need help getting it.

He was sensitive to loud noises and covers his ears when distressed, although he would become tolerant after some time in the same environment.

When expressing feelings of happiness or frustrations, he would make loud noises, jump up and down, and run across the room.

He was very frightened of dogs despite having numerous sessions of dog therapy.

He had a distinct lack of awareness of surrounding dangers.

He was very selective with food, preferring rice, green vegetables, baked beans and cooked cornmeal, and currently eats no meat, with only plain water to drink.

Is a happy and cheerful boy and likes playing and physical contact with familiar people; although he was previously very cautious of strangers, he now adjusts to their company after 5-10 minutes and relaxes.

He enjoys being in water, particularly showering and swimming.

He is very particular about items being in place.

Plays a lot of computer games and excels in most.

Treatment Schedule

As well as stem cell treatment, the patient also received acupuncture, nerve growth factor (NGF) and immuno-modulation injections, hyperbaric oxygen therapy (HBOT), transcranial magnetic stimulation (TMS), physical therapy (PT), occupational therapy (OT) and nutrition counseling.

The patient received 6 umbilical cord-derived stem cell packets by IV and lumbar puncture (LP), as per the schedule below:

Number	Date	Cell Type	Delivery Method	Side Effects
1	June 3, 2019	USMSC	IV	No
2	June 6, 2019	UCMSC	IV	No
3	June 6, 2019	UCMSC	LP	No
4	June 11, 2019	USBSC	IV	No
5	June 11, 2019	USBSC	LP	No
6	June 14, 2019	USBSC	IV	No

Condition 1 month after treatment:

The patient's mother said: "[He] used to cut his own hair and not allow anyone else to do it. He agreed to have his sister gave him a haircut...for the first time! He is still eating a wide variety of food and fruit. He told his teacher 'finish' after eating all of his dinner of jacket potato and salad!"

Please see an excerpt from the parent's 1 month assessment below:

Symptom	Parents' Assessment of Improvement
Anxiety or fearfulness	Small improvement
Appropriate facial expressions	Small improvement
Asking questions	No improvement
Aware of danger	No improvement
Aware of environment	Small improvement
Comfortable with physical contact	Small improvement
Concentration	Moderate improvement
Cooperation with others	Moderate improvement
Dressing himself/herself	Small improvement
Expressing own needs	Small improvement
Fixation on objects or subjects	Moderate improvement

General conversation	Small improvement
General mood	Moderate improvement
Hyperactivity	Moderate improvement
Interaction with others	Small improvement
Interest in others	Moderate improvement
Limited diet	Significant improvement
Obsessive speech	Small improvement
Over/under eating	Moderate improvement
Plays appropriately	Moderate improvement
Repetitive movements	Moderate improvement
Responding to commands	Moderate improvement
Rigidity in routine	Moderate improvement
Sensitivity to pain	Small improvement
Showing imagination	Small improvement
Sleep disturbance	Moderate improvement
Understanding stories	No improvement
Uses eye contact	Small improvement
Uses greetings	Small improvement
Using more than one word at a time	Small improvement
Using sentences	No improvement

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