

Spinal Cord Injury (March 30, 2009)

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The patient is a 57-year-old male, he presented as having motor and sensor disturbance of his lower limbs, together with urinary and fecal incontinence for 2.5 years after his traffic accident. He was diagnosed with spinal cord injury post trauma (T7-T9). It is the second time he was hospitalized.

After he had spinal surgery, we started to give the patient tracking treatment. Here is the patient's clinical condition when he first arrived at our medical center: vital signs are stable, dyspnea; he was too weak to cough the sputum out. Patient had abnormal zonesthesia tightening feeling in his costal arch. Patient was alert, mental status is weak, low and weak voice, memory, calculation and orientation ability are all normal, his neck can move flexibly, muscle force of his upper limbs are 5 degrees, and muscle tone is normal, tendon reflex of bilateral upper limbs are normal, patient had anesthesia and akinesia since T8 level below. Muscle force of both lower limbs are 0 degrees, bilateral palmomental reflex is positive, Hoffmann sign of both sides are negative, Rossilimo sign of both sides are negative, bilateral Babinski signs are positive.

CT scan of thoracic vertebra: there is a metallic internal fixator in spinouts process area from T2-T9 level. There is high-density in front of the vertebral body of T7, T8 and T9; multiple rib fractures on both sides.

Diagnosis: Post-traumatic spinal cord injury

Treatment target:

Our treatment aimed at improving the patient's respiration, his control ability of defecation, his movement ability and sensitivity of the lower limbs.

Treatment procedure and results:

We gave the patient 4 stem cells implantation treatment and self stem cells activation treatment to repair the neuron damage. The patient received treatment to improve blood circulation to increase the blood supply of those damaged nerves and nourish the neurons, together with daily rehabilitation training to promote the recovery of his motor function.

Patient's condition had good improvement gradually: now his breathing is ok, he can cough and spit sputum as normal, his abnormal zonesthesia tightened feeling in his costal arch has disappeared completely, while he still has tight feelings in part of his abdomen. He can speak loudly. His mental status is much better now. Muscle force of his lower limbs can reach 1-2 degrees when he is given pain stimulation. Muscle tone of his legs is normal. Tendon reflex of his lower extremities exist, although slower than normal. His bilateral abdominal reflexes can be induced slightly by examination. He regained superficial sensitivity from T8-T10; he had accurate pain feeling while the right side is much better than the left side. Patient regained mild deep sensitivity in bilateral anterior superior iliac spine area. He can feel some numbness from his legs

to his feet, which means that he had regained some proprioception. It is more obvious when he is standing in training class. He has regained some feeling while urinating when we give him a bladder irrigation and perineum cleaning.

Case analysis:

We can make sure of the diagnosis of complete spinal cord injury according to the patient's symptoms and the imaging examination results. After two years of tracking his treatment, the patient has part recovery of his movement ability and sensor ability below the spinal cord injury level. Now we can reconsider his damage as an incomplete damage. In the long terms treatment procedure, we achieved the therapeutic goal basically. Since the patient is overweight, this will influence his recovery. Our doctors have been advised to control his weight besides the general neurological treatment and rehabilitation training; this was of great assistance to the patient' s later recovery.