

CASE STUDY

19-Year-Old Spinal Cord Injury (SCI) Patient (ASIA C, T-10)

PERFORMED AT:
Competitive Edge Physical Therapy in Tampa, Florida using the NeuFit Method.

DIAGNOSIS:

Patient suffered a SCI due to a gun shot wound, and had a left thoracotomy and 7th rib removed. When he began NeuFit therapy 8-months post-injury, he presented with the ability to perform only trace contractions in left lower extremity (LE) and no motor control in right LE. He began therapy 8 months post-injury.

TREATMENT AND OUTCOME:

Over a 7-month period, patient performed an average of 2 sessions per week at Competitive Edge Physical Therapy (CEP) in Tampa, FL. In these sessions he utilized the Neubie® device for neuromuscular re-education of the feet, legs, hip/pelvis, and core musculature.

Here are some of the milestones he achieved:

- In 4 weeks, he regained bladder control and was able to get off his catheter (he previously needed his catheter 100% of the time)
- By 3 months, his core muscle control improved to the point where he could sit erect without leaning on his wheelchair and could reach out without loss of balance
- At 3.5 months, his reduction in clonus permitted significant increases in LE ROM
- After 6 months of treatment, he was able to consciously dorsiflex his foot for the first time since the injury
- At 7 months, he is began standing with assistance and has hopes of regaining even more function in the future

DISCUSSION:

Before he began his treatments at CEP, he had made very little progress in his therapy over the previous 8 months. He was pleasantly surprised at the rate of progress when he began NeuFit treatments, and it empowered him to start playing sled hockey and other athletic pursuits. After the initial bout of therapy, he also had to take about two months off for personal reasons. Though he feared much of the progress would be lost during that time, he was able to pick up right where he left off. This experience illustrates the lasting effect of treatment, and may provide evidence of longer-term, neuroplastic changes.