

Patients with Stroke report positive effects with Autologous Stem Cell Transplantation (N=60)

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Introduction

Recently, Autologous Stem Cells from bone marrow have been shown to display some potential for tissue reconstruction in various neurodegenerative and muscle degenerative diseases. These cells are easily accessible from patients and can be expanded on a therapeutic scale¹. Although the mechanisms are not yet fully understood, some small open clinical trials with Stroke patients have demonstrated a positive effect of Autologous Stem Cells on their use and proved to be safe²⁻⁵.

Methods

XCell-Center treated Stroke patients (N=60) with Autologous Stem Cells derived from the bone marrow. After preparation of stem cells by centrifugation techniques and quality assessment of the cell suspension, the cells were injected by lumbar puncture (intrathecal). The patients were then invited to participate in the evaluation of clinical effects of this intervention by completing a post-treatment survey 10 days after the treatment and a follow up survey 6-12 months after treatment.

Results

The mean age of patients at the time before treatment was almost 50 years and nearly 75% of our patients were male. Mean time between treatment and follow up moment was about 9 months. Patients reported the first effects seen after stem cell treatment between 8 and 9 weeks. Improvements were reported in 55% of the patients. (Figure 1)

Stroke patients as a rule suffered spastic paresis, whether or not with aphasia and hemianopia. Over 40% of the patients reported clinical improvement with both decreased spasticity and paresis, resulting in improved walking (42%), stability (40%), and motor skills (development proximal > distal). Aphasia improved in 39% and hemianopia in 20%. (Figure 2 and 3)

Conclusions

Autologous Stem Cell Transplantation was considered efficacious in Stroke patients.

The reported improvements were considered relevant to enhance individual independency, improve their quality of life, and reduce their morbidity. The stem cell treatment was very well tolerated.

References

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