

THE FAMICORDS' OWN PRELIMINARY STEM CELL TREATMENT RESULTS IN NEUROLOGICAL DISORDERS

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Introduction: Human, multipotent, adult mesenchymal stem cells are intensively investigated worldwide, in the context of therapeutic tool in regenerative medicine. Also in neurology, many treatment attempts of severe neurological disorders have been made so far. Third party donor Wharton Jelly's derived mesenchymal stem cells (MSC) seems to be a good candidate for clinical application in neurology, because of their immunomodulation and highly regenerative properties.

Patients and methods: From 2014, for the treatment using MSC had been included 16 patients with neurological diseases such as: type 1 of hereditary motor and sensory neuropathy with central nervous system involvement and rod-cone dystrophy, pervasive developmental disorder, optic nerve damage and hearing loss, hypoxic ischemic brain injury, muscular dystrophy, cerebral palsy or multiple sclerosis.

In every case Wharton Jelly's MSC from third party donor were applied, either intravenously or intrathecally (only in one case). Each therapeutic procedure was clinically evaluated.

Results: In all neurological patients (after 1 – 5 intravenous and after one intrathecal infusion), no dangerous side effects of MSCs injections were reported, except for mild headaches, mild fatigue or transitional tachycardia with no need of medical intervention. Every patient is alive and in every case was observed clinical improvement.

Discussion: In Wharton Jelly's derived mesenchymal stem cells from unrelated and unmatched donors, the therapeutic procedure probably seems to be a good selection for achieving positive clinical results in various neurological disorders.