

Spinal Cord Injury Curative Therapies in the Pipeline

The following curative therapy examples have shown great promise for restoring sensation and function following spinal cord injury in laboratory animal models:

1. Olfactory (nasal) mucosa auto grafts—Lisbon, Portugal
2. Adult olfactory unsheathing cell auto grafts—Brisbane, Australia.
3. Fetal olfactory ensheathing glial transplants---Beijing, China, Dr. Hongyun Huang
4. Bone marrow stem cell auto grafts (adult)---Brazil, China
5. Fetal olfactory ensheathing glial and neural stem cell transplants---Novosibirsk, Russia
6. Fetal spinal cord transplants---United States, Russia and Sweden
7. Adult Schwann cell auto grafts—United States
8. Fetal Schwann cell transplants---Kunming (Yunnan), China.
9. Porcine fetal neural stem cell transplants—United States
10. Adult activated macrophage auto grafts.--- Proneuron company, Israel & United States.
11. Adult peripheral nerve auto grafts.—Ecuador, Taiwan
12. Umbilical cord blood transplants--- Korea and Mexico.
13. Combination therapies announced in 2004---Miami and San Diego:
*Cellular transplants (Schwann, bone marrow mesenchymal) combined with other therapies (db cAMP, Rolipram, GDNF, and chondroitinase) have been demonstrated to be significantly more effective than cellular transplants or growth factors alone. Announcement of several more similar type therapies is expected in the coming months.

Although not a full cure, the above clearly demonstrates the science is ready. A modest investment of \$300 million dollars over the next three years would provide the funding to establish a US spinal cord injury clinical trial network to test many of these therapies in humans. Even the modest success of these therapies could translate to a savings of billions of dollars to the US economy.

Source: Wise Young, MD, PhD, respected Neuroscientist and Administrator of CareCure (www.sciwire.com), a community of over 9,000 members with spinal cord injuries and their supporters.