The "Mexican Method" as performed by Clínica Ruíz

Non-Myeloablative HSCT for MS & Autoimmune Disease

Dr. GJ Ruíz-Argüelles

Source: A. Arthur Fisher, www.incolor.net 6/2016, Version 10

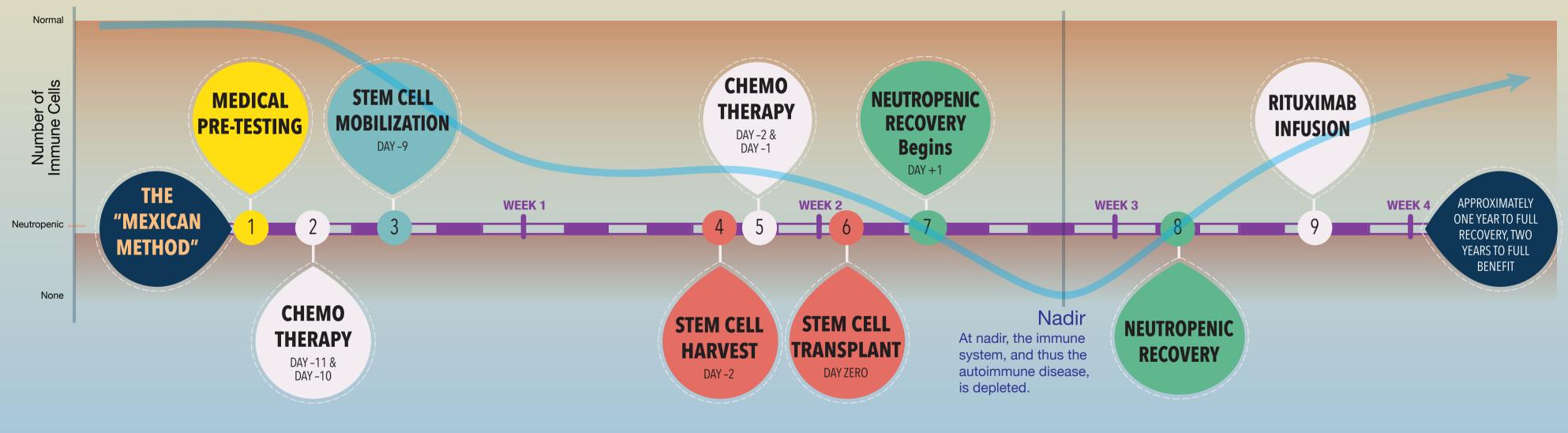
NOTE: this chart is my interpretation of the procedure. Timeline is approximate, different for each group and each individual.

Extensive medical tests include review of patient MRIs (brain plus cervical, thoracic & lumbar spine), chest X-ray, blood panel, electrocardiogram, spirometry. Consultation with neurologist, cardiologist & hematologist. Medical history.

Subcutaneous injections twice daily to mobilize the stem cells from the bone marrow into the blood. Outpatient surgery to install a hemodialysis catheter.

Two days of high-dose cyclophosphamide chemotherapy to destroy the majority of the existing immune system. This is the most crucial part of HSCT: everythig else supports this step.

During neutropenia, white blood cell count is abnormally low and susceptibility to infection is high. Diet and exposure are highly controlled. Stem cells grow into new immune cells without memory of MS. Additional growth factors are given to encourage additional new stem cells. Blood samples every 48 hours. Lots of prophylactic medication.



Two days of cyclophosphamide chemotherapy to condition the immune system- begin to kill white blood cells and mobilize new stem cells.

Apheresis. Patient's own adult stem cells are filtered out of the blood by a centrifuge and stored at four degrees celcius.

Day Zero. Stem cells are given back to the patient to speed up recovery.

White blood cells return to safer levels, but cautionary diet and exposure persist.

To minimize the chance of a post-procedural relapse, a rituximab infusion is given to deplete any remaining CD20 B-cells. Some people report noticable reversal of MS symptoms by this point. Patient is safe enough to return home.