Parkinson’s Disease and Growth Factors
Potential to Restore and Protect the Brain

The discovery of growth factors, naturally occurring substances that encourage the health and growth of a cell, opens the possibility to treat Parkinson’s disease course and not just the symptoms.

Think You or Someone You Know with Parkinson’s Might Qualify?

To learn more, please contact:

Amy Minnema, MSc
or Katherine Ambrogi, RN

OSUgenetherapyresearch@osumc.edu

The Ohio State University
Wexner Medical Center,
Department of Neurosurgery
Columbus, OH 43210

www.clinicaltrials.gov/NCT04167540
Eligibility for the Clinical Trial:
- Diagnosed with Parkinson’s disease
- Are 35-75 years old
- Without significant dyskinesias, depression, or memory impairment
- Do not have Deep Brain Stimulator (DBS) implanted

If You Are Eligible to Participate, Your Involvement Will Include:
- One-time surgical delivery of gene therapy
- Commitment to several visits over 5 years
- Close neurologic monitoring

Parkinson’s disease affects millions of people worldwide, yet no treatments exist to slow down or stop its progression.

A Gene Therapy Study: GDNF (Glial Cell Line-Derived Neurotrophic Factor)

The treatment uses an empty virus to deliver a normal copy of the human GDNF gene to support cells within a targeted area of the brain.

Delivering a Gene to Brain Cells
- Genes are instructions used by the normal machinery inside brain cells to make proteins, like GDNF
- Cells can use the proteins for activities like signaling growth and restoration of sick or dying cells

GDNF Gene Therapy
GDNF is a growth factor that potentially promotes healthy function of the dopamine-producing cells, the same cells affected in Parkinson's disease.
- We have high levels of this growth factor in youth, but it lessens with age
- GDNF is still needed in the adult and promotes the survival and health of cells
- This therapy may alter the disease course, not just treat symptoms