

Alternative Medicine in the Evaluation and Care of Parkinson's Disease Patients

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Orthodox medicine has long ignored gut bacteria's role in human health and disease. But things are changing.

So called "alternative" doctors and researchers – who are in fact the real men and women of medicine – have recognized the importance of probiotic organisms for a very long time, though they were ignored and dismissed by conventional doctors.

But today, even orthodox medicine is devoting an enormous amount of research to the link between diseases and imbalances of colon bacteria (a condition called dysbiosis). What they are finding is a powerful link between the colon and a wide range of ailments.

We will focus on how **gut-brain interaction** affects Parkinson's disease. But the same principles can apply to other neurodegenerative conditions, including **ALS, Alzheimer's disease, strokes, brain trauma, autoimmune disease, and multiple sclerosis**, which have been increasing tremendously in developed countries.

The Root Cause of Brain Problems

The concept of "**excitotoxicity**" – cell death and ensuing reactions – is relatively new in the field of neuroscience, and even many practicing neurologists and neurosurgeons know little if anything about the process. Yet it is crucial to any discussion of the brain.

The study of this important process began when a neuroscientist named John Olney came across an article written in 1957 by an ophthalmology resident. That resident had conducted an experiment with the food additive **monosodium glutamate (MSG)** to see if it would improve vision in animals.

The resident supposed that glutamate, the main component of MSG, might provide nutrient fuel for the retina of the eye. But rather than protecting the retina, glutamate caused widespread destruction of the nerve cells in the animals' eyes.

Dr. Olney repeated the study about 10 years later, and found that MSG not only destroyed the nerve cells of the retina, it also damaged some very important parts of the animals' brains.

Olney then exposed neurons in culture dishes to small concentrations of MSG, and, after an hour, the cells suddenly died. Olney had noticed that MSG caused the brain cells to fire electrical impulses very rapidly until eventually they died. He named this process of cell death "excitotoxicity", referring to the electrically excited state of the neurons (excito) and the poisoning effect of the process (toxicity).

Excitotoxicity affects many aspects of overall brain health:

Brain aging

Brain injury

Strokes

Infections of the nervous system

Mood disorders

Addictions

Developmental malformations of the brain

Neurodegenerative diseases.

Excitotoxicity also explains how many poisons, such as **pesticides, herbicides, heavy metals**, and other brain-toxic substances cause their damage.

In the case of Parkinson's disease, the main damage occurs in the dopamine-releasing (dopaminergic) neurons.

But it also can damage neurons that utilize other neurotransmitters, including norepinephrine, glutamate, and serotonin.

About 80 to 90 percent of the neurons in the substantia nigra are dopaminergic.

The main question is why does Parkinson's mainly affect dopamine-releasing neurons and not all others throughout the brain?

Parkinson's First Symptoms in Gut

From the time it was first identified, doctors recognized that the very first symptoms of Parkinson's disease involve **not** the nervous system but rather the **stomach and intestines**.

The majority of people who eventually develop Parkinson's disease first suffer a number of gastrointestinal complaints, including chronic constipation, nausea, feeling fullness after even a small meal, bloating after meals, and difficulty with swallowing.

These complaints can occur as much as a decade before the first neurological symptoms of Parkinson's are observed.

Unfortunately, until recently the medical profession ignored these findings.

Biopsies of Parkinson's patients' colons have found the very same **oxidized alpha-synuclein proteins** within the walls of their intestines that appear later in the brain. This has been shown both in humans and in animal models of Parkinson's disease.

The intestines contain an extensive network of nerves (called a plexus) just beneath the lining of the gut. This plexus of nerves is often referred to as the "second brain". (Enteric Nervous System)

It is these nerves that govern the movement of the intestines for digestion and aiding in bowel movements. Chronic inflammation in the intestines, especially the colon, can damage these neurons and the glial cells surrounding the neurons, resulting not only in accumulation of alpha-synuclein protein, but also leakiness of the gut – a condition now termed "**leaky gut syndrome**"

The colon is filled with more than **100 trillion** bacteria of many different species. When the gut is leaky, these bacteria can migrate into the wall of the colon and even into the bloodstream, triggering an immune-overreaction that not only inflames the intestinal wall, but also causes inflammation throughout the body and the brain.

Other Factors That Activate Immunity

There are a number of other factors known to be associated with Parkinson's, including:

- Mercury**
- Aluminum**
- Pesticides**
- Herbicides**
- Fungicides**

Brain trauma

Interestingly, all of these things can alter the gut's probiotic organisms and open the **blood-brain barrier**.

Toxic substances such as pesticides also directly induce inflammation in the brain and systemically throughout the body – depending on the concentration of the exposure.

Using special techniques that can also be used in people, the researchers measured the leakiness of the animals' intestines and examined their intestines for pathological changes typical to Parkinson's disease.

It is also interesting that a large percentage of Parkinson's patients eventually develop small intestine bacterial growth (SIBO). When this happens, the small intestine becomes leaky.

SIBO has been linked to physical rigidity in Parkinson's disease patients, which improves when the overgrowth is treated.

“This also indicates that as the dysbiosis and leakiness get worse, so do Parkinson's symptoms.”

Be Aware of Toxic Metals

At an ever-increasing rate, we are being exposed to a wide range of brain-toxic metals.

Mercury
Aluminum
Fluoride
Cadmium
Manganese
Lead

Over time, these metals accumulate in the brain and trigger long-term inflammation. Both mercury and aluminum have been linked to risks of **Parkinson's, Alzheimers, and ALS**. Mercury is found in the atmosphere and in some seafood.

But mercury comes mainly from vaccinations. Even though ethylmercury (Thimerosal) has been removed from most childhood vaccines, it is still in the **flu vaccines**. This form of mercury is one of the most toxic to the brain.

Aluminum contamination comes mainly from foods such as processed, cheeses, black tea, and soybeans. In addition, any food made with baking powder, such as biscuits, pancakes, and many breads, also contain aluminum. (You can buy aluminum-free baking powder, but manufacturers do not use it). Food and drinks packaged in aluminum cans may also be contaminated, especially if they are acidic. Never wrap foods in aluminum foil, and absolutely never cook in aluminum cookware, even if it is coated, as the coating eventually gets scratched.

The leading source of aluminum contamination today is vaccines. This metal is used as an adjuvant (an immune-boosting agent) in most vaccines and it has been shown to travel to the brain accumulating in brain cells.

In conclusion, our office routinely evaluates and treats many patients with Parkinson's disease along with all other neuro-degenerative diseases that affect adults and children. We pride ourselves in finding the causes(s) of Parkinson's disease and therefore can promote the proper protocol for treatment, stability and resolve.

Dr. Badanek has been and currently is 37 years into active/private practice in the Ocala/Marion County, Florida region. Dr. Badanek practices Natural/Holistic Medicine through the use of Functional/Integrative Models for diagnostic and treatment protocols for the health challenged. Find him online at Dr.Badanek.com and www.alternativewholistic.com, and see what the facility has to offer the sick and health challenged. To schedule an appointment call 352-622-1151