

CONFERENCE LECTURERS HAVE PUBLISHED 22 RND RELATED PEER-REVIEWED PAPERS POSTED ON THE NATIONAL INSTITUTES OF HEALTH – NCBI WEBSITE

MEDICAL EDUCATION -

IDENTIFICATION AND MANAGEMENT OF

“DISEASE-LIKE RELATIVE NUTRITIONAL DEFICIENCY SYMPTOMS”™

PRODUCED BY NEURORESEARCH CENTERS, INC. OF DULUTH, MN WHO HAVE PRODUCED OVER 150 CONFERENCES SINCE THE YEAR 2000

A **relative nutritional deficiency** occurs when an optimal diet does not meet the needs of the system.™ Example, whenever serotonin, dopamine, or glutathione concentrations are **low, inadequate, depleted, or suboptimal** on an optimal diet, a **relative nutritional deficiency** of the nutrients required for their synthesis is always present.



If disease symptoms relating to serotonin, catecholamines, or thiols are present on an optimal diet and administration of nutrients induces relief of symptoms, then the symptoms relieved are not from the disease they are from disease-like relative nutritional deficiency symptoms.™

WHO WE ARE

We are clinic-based medical doctors. Our databasing of patient outcomes started in 1994 in Duluth, MN. We started in a unique environment, with Duluth being the only city in the USA where commercial insurance reimbursed for previously not covered management of serotonin and norepinephrine related problems.

While our initial approach in 1994 to 1999 was the prescribing of drugs, short-comings caused us to look for solutions to the problem relating to the reuptake inhibitor drugs we were prescribing. In 1997, after realizing that the drugs were depleting the very neurotransmitters they worked with, we began to replenish them with the amino acids and cofactors required by the body to make serotonin and norepinephrine. With the initial positive response, we never looked back.

Now with over 20 years of research, this project continues to blossom. At present there are over 700 medical practices utilizing this approach. We have over 1,000 databases. The largest database contains over 4 million patient-days of documented patient outcomes.

Whenever **low, inadequate, depleted, or suboptimal** serotonin, dopamine, or glutathione concentrations exist on an optimal diet, it represents a relative nutritional deficiency of the nutrients required by the body to make these things. Nutrients are required to restore normal function. Drugs are not indicated for nutritional deficiency. For many years, physicians who did not know what they were looking at have prescribed drugs for these nutritional deficiency symptoms. When a relative nutritional deficiency is present, drugs treat the symptoms (band-aid) while nutrients address the cause. Achieving optimal response is much more complicated than simply giving some pills. Without training and consult support, all patients in the practice will not realize optimal potential. This leaves some patients suffering needlessly from relative nutritional deficiency related issues.

Literature notes, “It is postulated that over 80% of humans suffer from symptoms relating to a serotonin and/or catecholamine RND (relative nutritional deficiency).”

These statements have not been evaluated by the Food and Drug Administration (FDA). These nutrients are not intended to diagnose, treat, cure, or prevent any disease.

Atlanta Saturday April 27, 2019 - 9am to 4pm (Atlanta Airport Marriott)
Seattle Saturday June 15, 2019 - 9am to 4pm (Seattle Airport Marriott)

www.NeuroSupport.com - To register call: +1-218-626-2220
Registration fee: \$200 for new attendees (\$100 for attendees of previous NeuroResearch conferences, lunch included)

Differential diagnosis: The process of differentiating between two or more conditions which share similar signs or symptoms

Example: Disease symptoms and disease-like relative nutritional deficiency symptoms may be identical

WE DEFINED THE RELATIVE NUTRITIONAL DEFICIENCY™ GOLD STANDARD DEFINITION

Perform a Google search: relative nutritional deficiency

The first item returned is the definition from one of our relative nutritional deficiency papers as posted by the National Institutes of Health on its NCBI website.



DISEASE AND DISEASE-LIKE RELATIVE NUTRITIONAL DEFICIENCY SYMPTOMS™ NEED DIFFERENTIATION

When the provisional diagnosis is made, diseases and nutritional conditions with similar signs and symptoms need to be differentiated.

When relative nutritional deficiency symptoms™ are present, proper administration of nutrients may prompt partial or complete resolution of symptoms.

THE PROVISIONAL DIAGNOSIS

If it is believed that **low, inadequate, depleted, or suboptimal** concentrations of serotonin, dopamine, or glutathione is present, an empirical trial of nutrients is indicated.

EXAMPLE

Under the DSM-5 the **provisional diagnosis** of depression is made.

Next the **differential diagnosis** is formulated:

1. Depression (Major affective disorder)
2. Rule out depression-like anemia symptoms
3. Rule out depression-like hypothyroid symptoms
4. Rule out **depression-like relative nutritional deficiency symptoms™**

NORMAL MAY NOT BE OPTIMAL

There are two general categories of nutritional deficiency: **absolute nutritional deficiency** and **relative nutritional deficiency**.

With an absolute nutritional deficiency, returning nutrient intake to normal is all that is required. An example of absolute nutritional deficiency is scurvy (vitamin C deficiency). Proper management of scurvy is to reestablish normal vitamin C intake. With relative nutritional deficiencies, an optimal diet does not meet the needs of the system.

THE CENTRALLY ACTING MONOAMINES: Serotonin, dopamine, norepinephrine and epinephrine

THE THIOLS: L-methionine, S-adenosylmethionine, homocysteine, S-adenosylhomocysteine, cystathione, L-cysteine, and glutathione

DRUG INDICATIONS AND CAPABILITIES

Drugs do nothing to address the etiology of disease-like relative nutritional deficiency symptoms™ caused by **low, inadequate, depleted, or suboptimal** concentrations of serotonin, dopamine, or glutathione on an optimal diet. Reuptake inhibitor drugs can deplete the monoamines by facilitating movement into an environment of accelerated metabolism. When this happens, it represents a drug-induced relative nutritional deficiency.

EXAMPLE DEPRESSION AND DEPRESSION-LIKE

Depression-like RND symptoms™ and reuptake inhibitor drug-induced RND symptoms™ may represent 13 different disease-like relative nutritional deficiency symptoms.™

VITAMIN B6 RND SYMPTOMS™

Vitamin B6 RND symptoms™ can have symptoms identical to any of the disease-like RND symptoms™ listed in the yellow area of page 3.

Correcting the vitamin B6 deficiency tends to be associated with partial relief of disease-like RND symptoms.™ Complete resolution of disease-like RND symptoms™ with only vitamin B6 administration is not common.

Vitamin B6 RND symptoms™ tend to afflict only a minority of patients with any given disease-like presentation.

COURSE OBJECTIVES

The participant will be able to identify and manage centrally acting monoamine and/or thiol:

1. Disease-like relative nutritional deficiency symptoms™
2. Drug-induced relative nutritional deficiency symptoms™
3. Nutrient-induced relative nutritional deficiency symptoms™
4. The associated side effects

Speaker: Marty Hinz, MD

Medical Director of NeuroResearch Centers

- 47 years of medical experience
- 22 years of disease-like nutritional research
- Authored 22 peer-reviewed papers posted by the National Institute of Health on its NCBI website
- Holds numerous patents on citalopram and es-citalotram
- Holds numerous trademarks based on ground breaking science of centrally acting monoamines and thiols

If a disease associated with serotonin or dopamine dysfunction occurs on the provisional diagnosis and rule out disease-like relative nutritional deficiency symptoms is not in the differential diagnosis, then the cause of symptoms may be misdiagnosed.

Understand how B6 relative nutritional deficiency contributes to all RNDs

DISEASE-LIKE RELATIVE NUTRITIONAL DEFICIENCY SYMPTOMS™ (RND™)

Caused by **low, inadequate, depleted, or suboptimal** synthesis of serotonin, dopamine, or glutathione on an optimal diet.™

PARTIAL LISTING OF DISEASE-LIKE RELATIVE NUTRITIONAL DEFICIENCY SYMPTOMS™

This course teaches understanding of the prevalence and management of each **disease-like RND™** listed to the right in relation to the disease.

When a potential disease is established in the provisional diagnosis, if the possibility of **low, inadequate, depleted, or suboptimal** serotonin or dopamine exists, then the appropriate disease-like RND symptom™ reference (listed to the right) must be included for work-up in the differential diagnosis for a comprehensive evaluation to occur.

To learn more, visit us online at: www.NeuroSupport.com

Disease-like symptoms™ that may be caused by monoamine RND™
Inadequate, low, depleted, or suboptimal serotonin or dopamine on an optimal diet = relative nutritional deficiency

DOPAMINE RELATED RND™

Parkinson's disease-like RND symptoms™
Restless Leg Syndrome-like RND symptoms™

NEEDS DOPAMINE CHALLENGE™

Adrenal fatigue-like RND symptoms™
Alcoholism-like RND symptoms™
Allergy-like RND symptoms™
Asthma-like RND symptoms™
Chemical sensitivity-like symptoms™
Peanut allergy-like RND symptoms™
Food allergy-like RND symptoms™
Urticaria-like RND symptoms™ Bipolar-like RND symptoms™
Essential tremor-like RND symptoms™ (R/O Parkinson's disease-like symptoms)
Fatigue-like RND symptoms™
GI disorder:
Crohn's-like RND symptoms™
Irritable bowel disease-like RND symptoms™
Ulcerative Colitis-like RND symptoms™
Hormone dysfunction-like RND symptoms™
Cortisol dysfunction-like RND symptoms™
PMS-like RND symptoms™
Lyme disease-like RND symptoms™
Psychotic illness-like RND symptoms™
Schizophrenia-like RND symptoms™

When not enough

serotonin, dopamine, or glutathione is present on an optimal diet a relative nutritional deficiency™ of the nutrients required for their synthesis always exists.

SEROTONIN RELATED RND™

Addiction-like RND symptoms™
Alzheimer's-like RND symptoms™
ADD-like RND symptoms™
ADHD-like RND symptoms™
Autism-like RND symptoms™
Cognitive deterioration-like RND symptoms™
Chronic monoamine depletion:
Chronic illness-like RND symptoms™
Chronic pain-like RND symptoms™
Chronic stress-like RND symptoms™
Dementia-like RND symptoms™
Depersonalization disorder-like RND symptoms™
Depression-like RND symptoms™
Eating disorder-like RND symptoms™
GABA dysfunction-like RND symptoms™
Anxiety-like RND symptoms™
Glutamate regulation-like RND symptoms™
Panic disorder-like RND symptoms™
Stiffman Syndrome-like RND symptoms™
Hyperactivity-like RND symptoms™
Insomnia-like RND symptoms™
OCD-like RND symptoms™
Organ system dysfunction-like RND symptoms™
Phobias-like RND symptoms™
PTSD-like RND symptoms™
Seasonal affective disorder-like RND symptoms™
Social anxiety disorder-like RND symptoms™
Tension headache-like RND symptoms™
Tourette's Syndrome-like RND symptoms™
Traumatic brain injury-like RND symptoms™
Trichotillomania-like RND symptoms™
Fibromyalgia-like RND symptoms™
Migraine-like RND symptoms™
Abdominal migraine-like RND symptoms™
Migraine Headache-like RND symptoms™
Atypical migraine-like RND symptoms™

Obtaining optimal results requires training, there are many decisions that are counter-intuitive (the opposite of common sense).

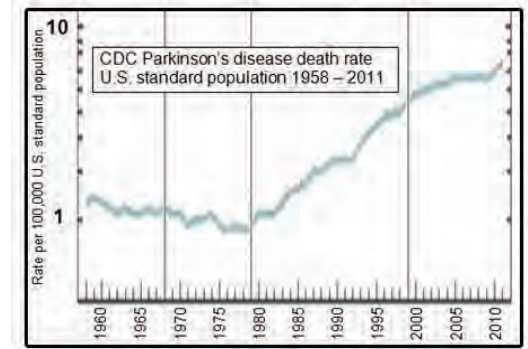
Visit us online @ www.NeuroSupport.com

IS THIS A DEVASTATING RELATIVE NUTRITIONAL DEFICIENCY?™

Between 1976 and present the Centers for Disease Control reported a 390% increase in the Parkinson's disease death rate

89% of Parkinson's disease patients take carbidopa

- Carbidopa binds irreversibly to vitamin B6 causing **drug-induced vitamin B6 relative nutritional deficiency™**
- Vitamin B6 depletion is associated with an increased death rate from all causes.
- The Parkinson's disease death rate decreased between 1958 to 1976 when patients were given only L-dopa
- Since carbidopa became available in 1976 the Parkinson's disease death rate has increased 390%



IMPROPER ADMINISTRATION OF NUTRIENTS CAN DEplete THE SYSTEM (CAUSE RND) AND CAUSE SIDE EFFECTS

Serotonin, dopamine, and thiol precursors with cofactors must be given simultaneously in proper balance. If they are not given in proper balance, nutrient-induced relative nutritional deficiencies™ will occur. Nutrients given in proper balance have no side effects. Side effects signal improper nutrient administration.

Dopamine precursors, serotonin precursors, and thiols can cause RND

L-dopa can induce depletion (RND) of serotonin, serotonin precursors and all seven thiols (see page 2). **Serotonin precursors** can induce depletion (RND) of dopamine (catecholamines), dopamine precursors, and all seven thiols. **Thiol** (glutathione, SAME, etc.) administration can induce depletion (RND) of dopamine (catecholamines), dopamine precursors, serotonin, and serotonin precursors.

ENDOGENOUS V. COMPETITIVE

The endogenous state occurs when no amino acid precursors are given or just one amino acid precursor is given. The competitive inhibition state occurs when significant amounts of serotonin and dopamine precursors are given simultaneously. Endogenous observations are not predictive of competitive inhibition outcomes.

Medical Education Conference:
Managing disease-like relative nutritional deficiencies™
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L-dopa is a naturally occurring aromatic amino acid dopamine precursor

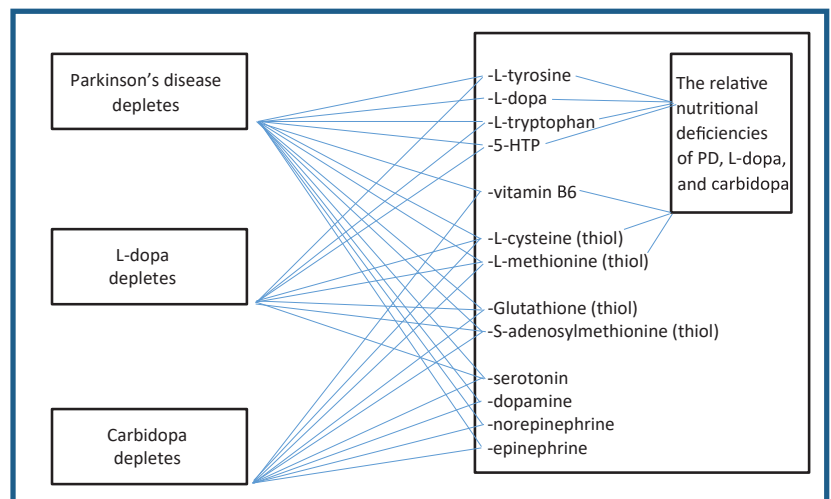
The primary cause is Parkinson's disease-like symptoms from dopamine related relative nutritional deficiency.

THE 29 PARKINSON-LIKE RELATIVE NUTRITIONAL DEFICIENCY CAUSES

RNDs may develop when Parkinson's disease is treated with L-dopa and carbidopa. Many of these relative nutritional deficiencies have Parkinson's disease-like symptoms. Properly addressing all relative nutritional deficiency symptoms™ is the only way to:

- Achieve optimal relief of disease-like RND symptoms™
- Halt or slow collapse and progression of RND-related symptoms™

Optimal stabilization depends optimally addressing nutritional deficiencies



Each line from Parkinson, L-dopa, and carbidopa represents a potential RND cause.

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