# Casual Friday Series Making Sense of Migraines

A Biogenetix Clinical Presentation

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# Disclaimer

- Information in this presentation is not intended, in itself, to diagnose, treat, reverse, cure, or prevent any disease. While this presentation is based on medical literature, findings, and text, The following statements have not been evaluated by the FDA.
- The information provided in this presentation is for your consideration only as a practicing health care provider. Ultimately you are responsible for exercising professional judgment in the care of your own patients.



## Classes for your patients...AND PROSPECTS







Temporomandibular Joint (TMJ): Pain at the temples, in front of the ears.



Sinusitis: Pain behind the brow bone and/or cheekbones.

Cluster: Pain in and around one eye.



**Tension:** Pain is like a band squeezing the head.

**Migraine:** Pain (one sided), Nausea and visual changes.



Cervicogenic (referred from the neck): Pain is at the top and/or back of the head.



Medication-overuse headache (MOH): dull constant pain, often worse in the morning.

https://doc.vortala.com/childsites/uploads/308/files/headache-types.png

#### The 4 Phases of a Migraine Headache



21-NEU-207442

#### **Common Migraine Triggers**

•Hormonal changes in women. Fluctuations in estrogen, such as before or during menstrual periods, pregnancy and menopause, seem to trigger headaches in many women.

•Hormonal medications, such as oral contraceptives, also can worsen migraines. Some women, however, find that their migraines occur less often when taking these medications.

•Drinks. These include alcohol, especially wine, and too much caffeine, such as coffee.

•Stress. Stress at work or home can cause migraines.

•Sensory stimuli. Bright or flashing lights can induce migraines, as can loud sounds. Strong smells — such as perfume, paint thinner, secondhand smoke and others — trigger migraines in some people.



### **Migraine Triggers – Cont'd**

- •Sleep changes. Missing sleep or getting too much sleep can trigger migraines in some people.
- •**Physical factors.** Intense physical exertion, including sexual activity, might provoke migraines.
- •Weather changes. A change of weather or barometric pressure can prompt a migraine.
- •Medications. Oral contraceptives and vasodilators, such as nitroglycerin, can aggravate migraines.
- •Foods. Aged cheeses and salty and processed foods might trigger migraines. So might skipping meals.
- •Food additives. These include the sweetener aspartame and the preservative monosodium glutamate (MSG), found in many foods.



https://newsnetwork.mayoclinic.org/discussion/seedsfor-success-in-migraine-management/

"I call it the SEEDS for success in migraine management," says Dr. Starling.

SEEDS stands for:

- •S Sleep.
- •E Exercise.
- •E Eat healthy.
- •D Dehydration.
- •S Stress management.



#### Migraine: Multiple Processes, Complex Pathophysiology

Rami Bur: Migraine is a common, multifactorial, disabling, recurrent, hereditary neurovascular headache disorder. It usually strikes sufferers a few times per year in childhood and then progresses to a few times per week in Author i adulthood, particularly in females. Attacks often begin with warning signs (prodromes) and aura (transient focal neurological symptoms) whose origin is thought to involve the hypothalamus, brainstem, and cortex. Once the headache develops, it typically throbs, intensifies with an increase in intracranial pressure, and presents itself in association with nausea, vomiting, and abnormal sensitivity to light, noise, and smell. It can also be accompanied by abnormal skin sensitivity (allodynia) and muscle tenderness. Collectively, the symptoms that accompany migraine from the prodromal stage through the headache phase suggest that multiple neuronal systems function abnormally. As a consequence of the disease itself or its genetic underpinnings, the migraine brain is altered structurally and functionally. These molecular, anatomical, and functional abnormalities provide a neuronal substrate for an extreme sensitivity to fluctuations in homeostasis, a decreased ability to adapt, and the recurrence of headache. Advances in understanding the genetic predisposition to migraine, and the discovery of multiple susceptible gene variants (many of which encode proteins that participate in the regulation of glutamate neurotransmission and proper formation of synaptic plasticity) define the most compelling hypothesis for the generalized neuronal hyperexcitability and the anatomical alterations seen in the migraine brain. Regarding the headache pain itself, attempts to understand its unique qualities point to activation of the trigeminovascular pathway as a prerequisite for explaining why the pain is restricted to the head, often affecting the periorbital area and the eye, and intensifies when intracranial pressure increases.

"Anatomical "Disease" alterations in the brain" "migraine brain"

"generalized neuronal hyperexcitability"





#### Toxic Migraine













https://www.researchgate.net/publication/349191661/figure/fig1/AS:990023474233346@1613051398860/Hormonal-events-and-phases-in-a-eumenorrheic-28-day-menstrual-cycle-Adapted-from-McNulty.png

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- BP Meds
- DM2 Meds
- Fatigue
- Chronic HA
- Brain Fog
- Neuropathy

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Toxins Summary		Blank Cell - Low 🛛 🔴 High	Moderate - Not Ordered or N/A
		Current	Previous Result
	Organochlorine pesticides		
	Organophosphate pesticides	Dimethylthiophosphate (DMTP) •	
	Other pesticides/herbcides	Glyphosate •	
Environmental Toxins	Phthalate Metabolites	mono-2-ethylhexyl phthalate (MEHP) •	
	Parabens	Ethylparaben •	
	Acrylic Metabolites		
nvironr	Other Metabolites	N-Acetyl (2,Hydroxypropl) Cysteine (NAHP) •	
Ш	Alkylphenol	Bisphenol A (BPA) •, 4- Nonylphenol •	
	Volatile Organic Compounds (VOCs)	4-Methylhippuric Acid (4MHA) •, N- acetyl phenyl cysteine (NAP) •	
	Urine Creatinine		
22	Aflatoxin		
Mycotoxins V2	Other	Citrinin •, Chaetoglobosin A •	
coto	Trichothecenes	Satratoxin H •	
My	Urinary Creatinine		
Heavy Metals	Heavy Metals (Creatinine)	Arsenic •, Nickel •	

## Chemical







# Biogenetix: 833-525-0001



bruno@biogenetix.com



kim@biogenetix.com

