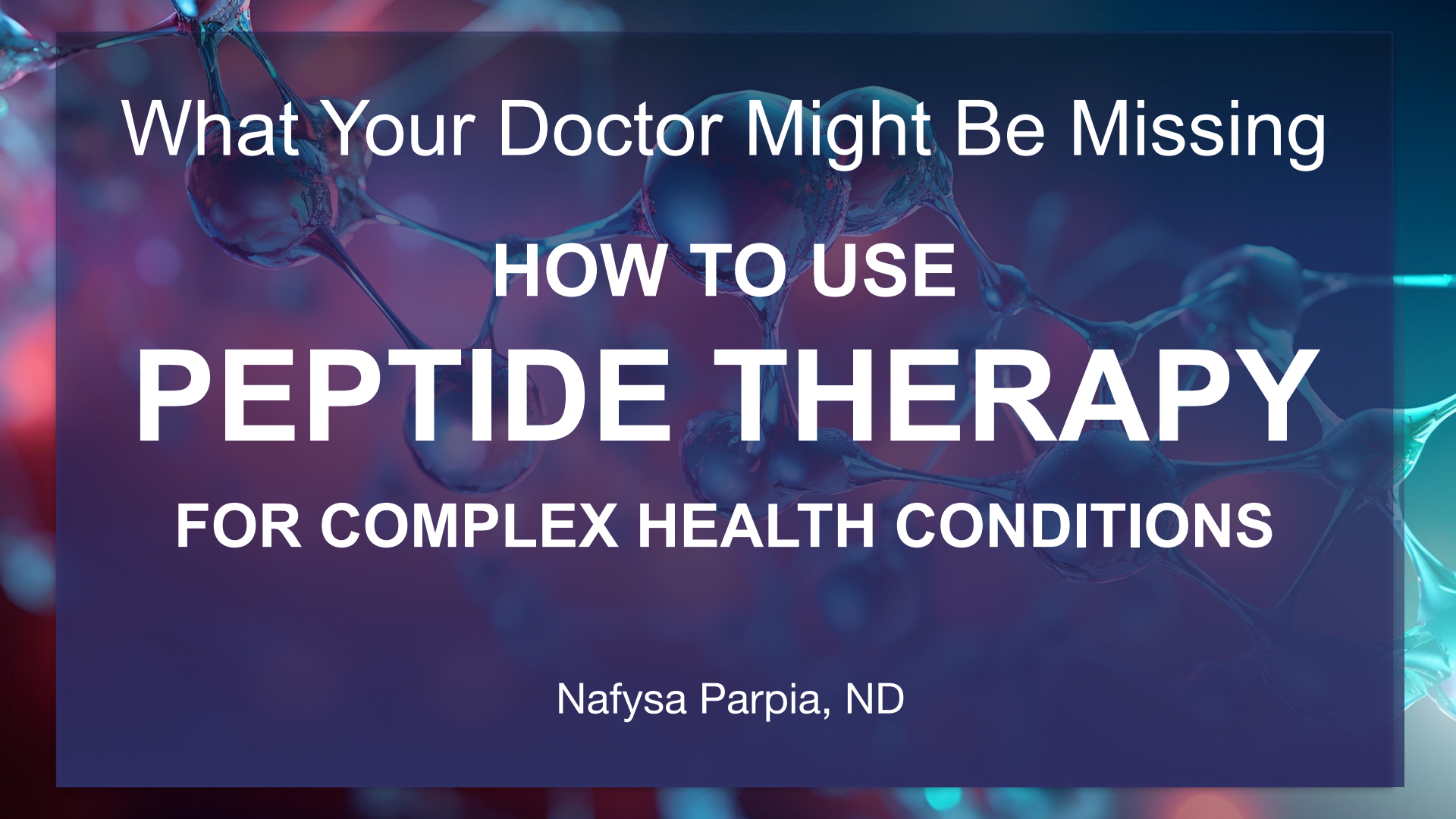


An abstract, artistic representation of a molecular structure, possibly a peptide chain, rendered in a dark blue and purple color palette. The structure features interconnected spheres and thin, translucent rods, creating a complex, three-dimensional web-like pattern. The background is a gradient of deep blues and purples, with some lighter, hazy areas that suggest a sense of depth and movement. The overall aesthetic is scientific and futuristic.

What Your Doctor Might Be Missing

HOW TO USE
PEPTIDE THERAPY
FOR COMPLEX HEALTH CONDITIONS

Nafysa Parpia, ND

INTRODUCTION

LONG BEFORE *PEPTIDE THERAPY* BECAME A BUZZWORD IN THE MEDICAL COMMUNITY

While the medical community has technically been using peptides for decades (morphine, penicillin, and insulin are all peptides), until recently, peptide therapy was something you'd only hear about in the most serious "biohacking" communities.



PEPTIDE THERAPY FOR COMPLEX CHRONIC CONDITIONS

Grounded in over a decade of extensive, continual research, and clinical expertise, Gordon Medical's use of these powerful molecular tools prioritizes individualized care and addresses the underlying factors that are unique to each patient — moving beyond standard protocols often only geared toward optimization or biohacking.



WHAT WE WILL COVER

- Myalgic Encephalomyelitis/Chronic Fatigue Syndrome (ME/CFS)
- Mast Cell Activation Syndrome (MCAS)
- Chemical Sensitivities
- Heavy Metals
- Detox
- Timing
- Safety & Sourcing

The content of this presentation is for informational purposes only and is not intended to be a substitute for professional medical advice, diagnosis, or treatment. Always seek the advice of your physician or another qualified health provider with any questions you may have regarding a medical condition.



PEPTIDE THERAPY

ME/CFS

Knowing the *Why*: No 'One Size Fits All' Peptide

Myalgic Encephalomyelitis/Chronic Fatigue Syndrome (ME/CFS)

- "Wastebasket Diagnosis"
- Requires further investigation of root causes
- Understand why a patient has this diagnosis
- No one peptide for ME/CFS
- Address potential underlying factors

PEPTIDE THERAPY

ME/CFS

Common Underlying Factors of ME/CFS

- Hormonal imbalances
- Multiple chronic infections
- Adverse childhood events/trauma
- Diet and nutrition
- Environmental toxin load
- Stress factors

PEPTIDE THERAPY

ME/CFS

Remember, we are treating the patient as a whole person, not simply their diagnosis - especially a catch-all one that could even be a misdiagnosis and likely contains multiple diagnoses.

PEPTIDE THERAPY

MCAS

ME/CFS Connection and Early Intervention

Unlike ME/CFS, specific peptides can be used to treat Mast Cell Activation Syndrome (MCAS)

- Most patients who have ME/CFS also have MCAS
- Testing of root causes/underlying diagnoses, and early treatment is critical
- Each patient's unique differences in underlying diagnoses will affect their protocol
 - Inflammation meets the genes
 - Multiple biochemical processes happening concurrently

PEPTIDE THERAPY

MCAS



Common Underlying Factors of MCAS

Multiple system insults can lead to:

- Immune dysregulation
- Inflammation
- Individual biochemical processes
- Hormonal Imbalances

PEPTIDE THERAPY

MCAS

Underlying Factors and Secondary Diseases

All common factors from multiple system insults stimulate genetic variations and lead to more waste basket diagnoses in the form of secondary diseases:

- ME/CFS
- Fibromyalgia
- Long Covid Autoimmune Conditions

PEPTIDE THERAPY

MCAS

Amlexanox

- Mast cell stabilizer
- Reduces inflammation
- Promotes relaxation and opening of airways
- Reduces insulin resistance
- Decreases inflammation and oxidative stress in the brain

KPV

- Found in naturally-occurring hormone alpha-MSH
- Immune modulation:
 - Mast cell stabilization
 - Anti-inflammatory effects
 - Antimicrobial effects: Candida albicans and Staph aureus

TB4-Frag

- Reduces inflammation and calms immune system
- Stimulates production, repair and regeneration of cells and new blood vessels
- Impacts multiple pathways for neurological recovery and brain plasticity

PEPTIDE THERAPY

Chemical Sensitivities

Triggers and MCAS Connection

- Theories as to the cause of chemical sensitivities
 - Allergy dysfunction
 - Neurobiological sensitization
 - Genetic makeup interaction with environmental triggers
- Patients with MCAS
 - Chemical sensitivities can trigger mast cells to release more inflammatory chemicals, exacerbating symptoms and causing further immune dysregulation
 - Use of peptides: amlexanox, KPV, TB4, follows similar MCAS protocol

PEPTIDE THERAPY

Chemical Sensitivities

Common Environmental Triggers

- Metals
- Glyphosates
- Microplastics
- Pesticides
- Solvents
- Molds / Mycotoxins

PEPTIDE THERAPY

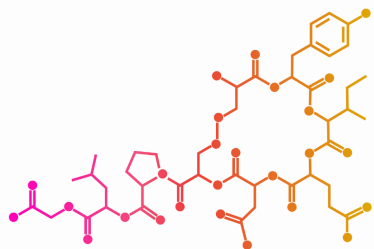
Emotional Support

Supportive Peptides

- Emotional aspects of chronic illness
 - Affects your condition and how you respond to therapies at any given time
 - Factors that impact immune function, hormonal balance, and healing potential
 - Stress, anxiety, unresolved trauma, feelings of isolation, lack of social bonding
- Peptides with nootropic benefits for providing essential support
 - Oxytocin
 - Selank

RECOMMENDED PEPTIDES

Emotional Support



Oxytocin

- Not just the “cuddle hormone” - a peptide hormone involved in stress reduction, pain relief, and social bonding
- Unique 9-ring structure
 - Allows it to bind specifically and tightly to its receptor
 - Offers stability in the body, making it resistant to certain enzymatic breakdowns

Selank

- Known for boosting learning, memory, and general cognitive function
- Reduces anxiety and depression; improves serotonin levels
- May increase BDNF (brain-derived neurotrophic factor: a protein that helps nerve cells survive, and function in the brain and spinal cord)

PEPTIDE THERAPY

Heavy Metals

Glutathione: the Primary Peptide for Heavy Metals

- More than just a powerful antioxidant
- Detoxifying tri-peptide (composed of three amino acids: glutamine, cysteine, and glycine)
 - Works within cells
 - Binds and neutralizes toxins
 - Supports liver detoxification
 - Protects against oxidative stress
- Only peptide that can target multiple toxins, chemicals, and metals at the same time

PEPTIDE THERAPY

Heavy Metals

Glutathione: the Primary Peptide for Heavy Metals

- Not always the first step, or go-to treatment for IV Therapy
 - Biochemistry of methylation pathways has to be tested
 - Can't stimulate a system that's already under oxidative stress
- Forms of glutathione and bioavailability
 - Liposomal vs. non-liposomal
 - Oral spray vs. liposomal capsules
- Sourcing
 - Avoid non-liposomal forms from regular pharmacies

PEPTIDE THERAPY

Pre-Tox

Why Pre-Tox Must Come Before Detox

- Before killing off infections and supporting detox pathways
 - Immune system needs to be monitored (overactive vs. underactive)
 - Calm the immune response with peptides in preparation
- Open the emunctories (detox pathways: liver, intestines, kidney, skin, and lungs)
 - Most crucial step to pre-tox
 - Immune system must be optimal enough to process cascade release of inflammatory cytokines during infection die-off and detox

PEPTIDE THERAPY

Pre-Tox

Signs You're Not Ready for Detox

- Constipation
- Recurrent UTIs
- Thyroid imbalance
- Poor nutrient status

Prerequisites for Detox

- Appropriate amino acid levels
- Proper mineral status
- Open drainage pathways
- Balanced nutrient co-factors
- Balanced hormones

PEPTIDE THERAPY

Detox

Protocols for Detox

Assessment requirements:

- Clinical history review
- Current toxin load and exposure history evaluation
- Genetic testing for detox pathways
- Using glutathione as the only direct detox peptide
- Direct peptides are available to support optimal detox:
 - Sleep, inflammation, hormonal support, GI, MCAS, mood

PEPTIDE THERAPY

Detox

Protocols for Detox cont.

Methylation pathway considerations:

- Testing requirements
- Supporting pathways before glutathione
- Oxidative stress evaluation

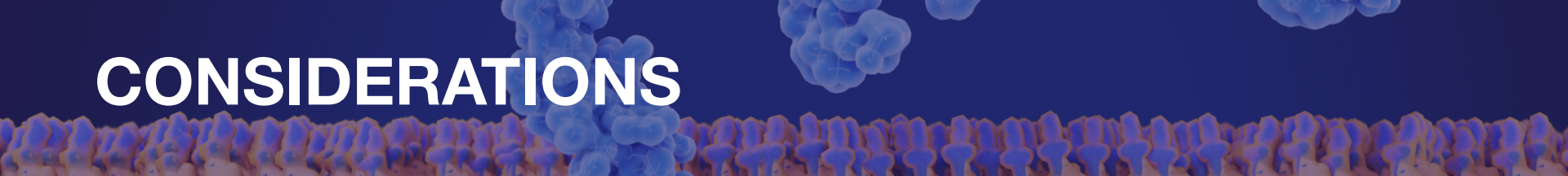
Individual considerations:

- Multiple toxin types
- Ongoing exposures
- Complex cases
- Need for personalized protocols

WHAT ABOUT THE MITOCHONDRIA?

Role of Peptides for Mitochondrial Support

- MOTS-C emerging research: not a complete picture
- Challenge of timing and when appropriate
- Supporting a stressed mitochondria prematurely can backfire
 - Signaling more inflammation
- Chronic conditions connection
 - MCAS
 - Chemical sensitivities
 - Heavy metals
 - Overall inflammation



CONSIDERATIONS

RIGHT PEPTIDE WRONG TIME

Applying certain peptides before you are ready in your healing cycle can aggravate existing symptoms.

DURATION CONCERNS

Being on a peptide for too long can have adverse effects; a break to adjust is often needed to then start again with a new, modified stack.

TIME OF DAY CONSIDERATIONS

Side effects of certain peptides can cause potential interferences with activities or sleep. *When* you take them during the day is crucial.

PEPTIDE COMBINATIONS & ORDERING

Speed up the healing process by combining specific peptides that work well together, introducing them in the right order at distinct phases of a patient's protocol, and finding the optimal timing between doses.

SAFETY & SOURCING



Availability & Quality Sourcing

- Increased availability online does not equal reputable sourcing
 - 80% of peptides purchased online were found adulterated or impure
- Difficult to regulate
 - Most peptides are not FDA-approved
 - Like supplements - quality varies: what's on the label vs. what's inside
- Bioavailability and synthesization
 - Oral/topical vs. injectable
 - Early days: derived from animal tissue
 - Today: synthesized and safe when made in a lab under specific conditions

SIDE EFFECTS & REQUIRED TESTING



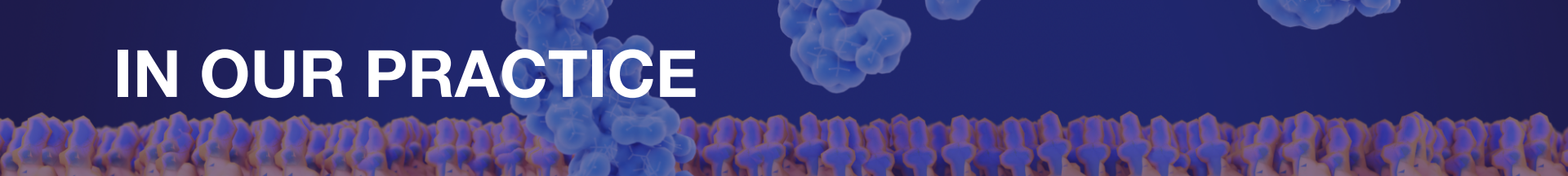
Possible Side Effects of Peptide Therapy

- Most common from injectables: localized redness, swelling, bruising at injection sites
- Occasionally: some nausea (usually transient)
- Some peptides may cause: constipation or other bowel issues (generally short-lived, not life-threatening)

Required* Minimum Testing Before Starting

- CBC, CMP, TSH, freeT3, freeT4, reverse T3, HemoglobinA1C, Vitamin D, Ferritin, Iron/TIBC
- *All other labs and imaging as pertinent to the individual patient's presentation and history

IN OUR PRACTICE



At Gordon Medical, our physicians use peptides specifically for creating a new healthy homeostasis; a new elevated normal baseline in patients with chronic illness.

As with any medication, supplement or herb, prescribing and monitoring the use of peptides needs to be comprehensive, highly personalized, and not a permanent band-aid solution. This is especially true for patients with complex chronic conditions. While peptides are naturally occurring and have minimal side effects, some are immune-stimulating, and some are immune-modulating. This is why we always recommend working with trained professionals.

CONCLUSION

When treating complex cases, it's critical to look at the entire patient, including their state of inflammation and immune dysregulation, toxic load, detox pathways, gut health, structural integrity, emotional state, and concurrent infection load. Failing to address each of these in a personalized manner can result in years on a treatment rollercoaster and feeling much worse before feeling better.

At Gordon Medical, it's been our life's work to find holistic solutions to complex chronic conditions. In fact, we've been practicing root cause and terrain-centered medicine along with symptom management for the last 30 years – specializing in illnesses that have been poorly understood and poorly treated for decades.