

Long COVID Strategies

Friday

1:00 – 2:30 – Long COVID intro

- I. COVID epidemiology**
 - a. COVID pathophysiology
 - b. Corona virus
 - 1. Lung barrier
 - 2. Spike protein
 - 3. ACE
- II. Long COVID intro**
 - a. Prevalence
 - b. Signs and symptoms
 - 1. Fatigue
 - 2. Dyspnea
 - 3. Cognitive decline
 - 4. Anxiety/depression
 - 5. Autoimmune
 - c. Review of the literature

3:00 – 4:30 Long COVID Pathophysiology

- III. Long COVID pathophysiology literature overview**
 - a. Mast cell activation
 - 1. Clinical work-up
 - 2. Laboratory assessment
 - a. Blood chemistry evaluation
 - 3. Clinical strategies
 - b. Immune dysregulation
 - 1. Clinical work-up
 - 2. Autoimmune prevalence
 - 3. Laboratory assessment
 - a. Blood chemistry evaluation
 - b. Specialty labs
 - 4. Clinical strategies
 - c. Review of the literature

5:00 – 6:00 Long COVID working through the web

- d. Endothelial dysfunction
 - 1. Clinical work-up

- 2. Laboratory assessment
 - a. Blood chemistry evaluation
- 3. Clinical strategies
- e. Occult viral persistence
 - 1. Clinical work-up
 - 2. Laboratory assessment
 - a. Blood chemistry evaluation
 - 3. Clinical strategies
 - 4. Review of the literature

Saturday

8:30 – 10:00 Long COVID resiliency model

IV. Long COVID resiliency model (BAIL EM out)

- a. Blood sugar regulation
 - 1. History
 - 2. Physical
 - 3. Laboratory Work up
 - 4. Care strategies
- b. Body balance (Cranio-cervical junction)
- c. Anemias and oxygen
 - 1. History
 - 2. Physical
 - 3. Laboratory Work up
 - 4. Care strategies
- d. Infection
 - 1. History
 - 2. Physical
 - 3. Laboratory Work up
 - 4. Care strategies

10:30 – 12:00 Long COVID resiliency model

V. Long COVID resiliency model (BAIL EM out)

- a. Liver/GI
 - 1. History
 - 2. Physical
 - 3. Laboratory Work up
 - 4. Care strategies
- b. Exercise
 - 1. Literature review

- c. Estrogen (hormones)
- d. Environmental
 - 1. Laboratory strategies for detection
 - 2. Detoxification strategies
- e. Microbiome
 - 1. Literature review
 - 2. Strategies for building Microbiome diversity
- f. Methylation
 - 1. Clinical assessment and strategies
 - 2. Literature review

1:30 – 3:00 Long COVID dietary, lifestyle and Nutraceutical management

VI. Long COVID dietary, lifestyle and Nutraceutical management

- a. Dietary
 - 1. How to select proper diet with literature review
 - a. Ketogenic
 - b. Paleolithic
 - c. Plant based
 - d. Mediterranean
 - e. Autoimmune
 - f. Intermittent fasting
- b. Lifestyle
 - 1. Sleep with literature review
 - a. Sleep apnea
 - b. Insomnia
 - c. Working through the clinical web
 - d. Building strategies for improved sleep
 - 2. Exercise with literature review
 - a. Which exercise is best suited for patient
 - 3. Stress with literature review
 - a. Stress resilience
 - 4. Toxic burden
 - a. Clinical presentation and evaluation
 - b. Detoxification strategies

3:30 – 5:00 Long COVID clinical work-up

VII. Long COVID clinical work-up

- a. History
 - 1. Focused history
 - 2. Relevant pre COVID history

- 3. Metabolic assessment
- 4. Brain function
- b. Physical examination
 - 1. Cardiovascular
 - 2. Neurological
 - a. CN's
 - b. Brain based
 - 3. General
- c. Laboratory work-up
 - 1. Blood analysis
 - 2. Selecting appropriate specialty testing
 - a. Immunological assays
 - b. GI
 - c. Allergy
 - d. In-depth cardiovascular
- d. Care strategy
 - 1. Mechanism based
 - 2. Resiliency model
 - 3. Dietary, lifestyle and Nutraceutical

5:30 – 6:00 Case Study

VIII. Putting it all together with a Long COVID case study

- a. Review of the clinical work-up
 - 1. History
 - 2. Relevant physical exam findings
 - 3. Blood analysis
 - 4. Specialty testing with analysis
- b. Review of the care strategy
 - 1. Mechanism approach
 - 2. Resiliency approach
 - 3. Dietary, lifestyle and nutraceutical approach

6:00 – 6:30 Review and Q&A

IX. Review of course

- a. Long COVID pathophysiology
- b. Long COVID working through the web
- c. Long COVID resiliency model
- d. Long COVID dietary, lifestyle, and nutraceuticals
- e. Long COVID clinical work-up

X. Questions and answers

- a. Questions submitted through the day and selected for review