Richard Malik, ND 199 Main Street, Suite 1 Salisbury, CT 06068 860-435-3009 doctor@maliknd.com

Richard Malik, ND Frank Nordt, Ph.D. 90 Minute Presentation

Bio-Identical Hormone Replacement: An Effective Approach for Assessment and Treatment

We will explain in a straightforward fashion the assessment, treatment, efficacy, and safety of bioidentical hormone replacement. We emphasize 24-hour urine hormone panel testing to accurately assess status pre- and post- treatment and the use of sublingual estradiol, progesterone, and testosterone as an effective treatment option.

Learning Objectives:

- 1. Understanding and avoidance of pitfalls in hormone testing
- 2. Recognizing the inherent benefits of hormone profiling as opposed to testing hormones individually
- 3. Appreciating the advantages of urinary hormone testing in comparison to saliva and serum
- 4. Acquiring a basic understanding of how to interpret urinary hormone profiles
- 5. Grasping the importance of ratios of hormone concentrations and concentrations of metabolites to each other
- 6. Realizing how concentration ratios can be utilized to infer enzymatic activities in the steroid metabolic cascade
- 7. Recognizing and understanding patterns in hormone profiles and how these relate to the pathophysiology of aging in both men and women
- 8. Mastering effective monitoring of hormonal therapeutic interventions
- 9. Choosing routes of administration of hormones when to use oral, transdermal, transmucosal/sublingual or injectable hormones
- 10. Gaining an understanding of modern Gas Chromatography/Triple Quadrupole Mass Spectrometry (GC-QQQ•MS) as the methodology of choice for hormone quantitation and profiling
- 11. Understanding the clinical relevance of 24-hour urine hormone testing for assessment of estrogens, progesterone, androgens, and adrenal hormones in peri-menopause, menopause, and andropause
- 12. Understanding how the common symptoms of peri-menopause, menopause, and andropause are used to determine appropriate treatment for these conditions
- 13. Understanding the efficacy and benefits of sublingual administration of bio-identical hormone replacement
- 14. Understand the use of urinary hormone testing to ensure reasonable prescribing of bio-identical hormones
- 15. Review the botanical, vitamin, and mineral treatment options for peri-menopause, menopause, and andropause
- 16. Understand the clinical and evidence based medicine safety concerns that apply to bio-identical hormone replacement therapy
- 17. Upon completion of the presentation, the clinician will be able to implement an easy and effective approach for managing patients with symptoms related to peri-menopause, menopause, or andropause.

Presentation Outline:

- Steroid hormones exert specific biological effects
 - interactions with high affinity receptors and
 - control of diverse physiological and cellular processes ranging from sexual differentiation to reproduction, growth, immunity, brain function and behavior
- Circumstances requiring accurate, reproducible and sensitive laboratory assays

- biochemical aberrations in the synthesis and metabolism of steroid hormones
- significant changes in the amounts of hormones produced and associated with menarche, adrenarche, menopause, and age-related decline in testosterone or hypothalamic-pituitary-gonadal maturation
- changes in synthesis and metabolism of adrenal steroids
- · Critical discussion of aspects of steroid hormone analyses
 - types of assays used to quantify steroid hormones
 - choice of specimen matrix (e.g., serum, urine or saliva)
 - the inherent pros and cons associated with each specimen matrix
- Concepts of hormone profiling from which a comprehensive view of steroid hormone balance emerges
- Highlighted problems inherent in immunologically based assays
 - significance of primary hormone metabolites
 - diagnostic implications of ratios of hormone metabolites to each other will be illustrated
- Case studies to demonstrate the utility of hormone profiling with interpretive guidance to the physician, allowing accurate diagnosis and maximum effectiveness in therapeutic intervention
- A review of the impact of changes in reproductive hormone levels on patient quality of life
 - The symptoms and physiology of peri-menopause
 - The symptoms and physiology of menopausal symptoms
 - The symptoms and physiology of andropause
- A review of the clinical utility of bio-identical hormones
 - The symptoms addressed by progesterone
 - The symptoms addressed by estrogen
 - The symptoms addressed by testosterone
- Clinical notes on the application of bHRT
 - A review of the use of urine hormone panel testing for the consideration of bHRT treatment
 - The advantages and disadvantages of different routes of administration for progesterone (oral, transdermal, and sublingual)
 - The advantages and disadvantages of different routes of administration for estrogen (intra-vaginal, oral, transdermal, and sublingual)
 - The advantages and disadvantages of different routes of administration for testosterone (transdermal, sublingual, troches)
- A review including case studies of the use of 24-hour urine hormone panel testing for assessment of response to bHRT
- A review including case studies of estradiol-only treatment of peri-menopausal, and menopausal symptoms over Tri-Est and Bi-Est formulations
- An EBM review of the safety bHRT
 - Conflicting evidence and recommendations on estrogen replacement
 - The risks associated with progestins and how this information applies to bio-identical progesterone
 - The theoretical and proven adverse effects of testosterone therapy

Pharmacy Discussion:

This presentation will contain a total of 100 slides. 35 slides will discuss pharmaceutical agents. 15 slides will discuss botanical, vitamin, and mineral treatments. 50 slides will discuss assessment and diagnosis.

Target Audience:

naturopathic doctors, medical doctors, other healthcare professionals and students

Biographical Sketch (Dr. Malik):

Dr Malik is a 2005 graduate of Bastyr University. He has licenses in Connecticut and Vermont where he practices in small communities as both a general practitioner and specialist. Dr. Malik focuses on integrating evidenced based medicine, traditional therapeutic knowledge, and common sense to expedite diagnosis, management, and treatment. With this approach, his goal is to help patients find the shortest

path to wellness that utilizes all of the treatment options available to them. He calls this approach Comprehensive Natural Healthcare.

Dr. Malik's favorite naturopathic principle is doctor as teacher. He regularly provides free presentations in his community on popular health topics, writes articles for local newspapers, has had radio programs, and published podcasts that inform the public and promote the field of naturopathy.

His goal is to empower doctors and their patients to make accurately informed decisions about issues that significantly impact patient quality of life.

Biographical Sketch (Frank Nordt, Ph.D.):

Frank J. Nordt, Ph.D. is the President and Founder of Rhein Consulting Laboratories, a CLIA certified reference laboratory in Portland, OR. Dr. Nordt is an expert pharmacologist and analytical biochemist with more than 30 years experience. His research and work have focused on advancing diagnostic technology and understanding of steroid metabolism and identifying sex and adrenal hormone imbalances, particularly as they impact pre- and postmenopausal women and aging men. Dr. Nordt has published extensively and continues to collaborate in research projects involving sex and adrenal steroids that are funded by the National Institutes of Health (NIH) in addition to providing the most advanced, accurate and clinically useful form of hormone profiling to patients worldwide.