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**Clinical Management of Centrally Acting Monoamine and/or  
Thiol Deficiency Conference  
November 3-5, 2017  
Chicago, IL**

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**Target Audience**

This symposium is designed for an audience of physicians, psychiatrists, clinical psychologists, gastroenterologists, naturopaths, nurse practitioners, physician assistants and other healthcare providers licensed to manage patient problems relating to serotonin, dopamine, norepinephrine, epinephrine and/or thiols.

**Learning Objectives**

Upon completion of the educational activity, participants should be able to:

- Explain the National Institute of Drug Abuse model as it relates to how reuptake inhibitors may deplete the centrally acting monoamines.
- Discuss how each of the following may be induced under the National Institute of Drugs Abuse reuptake inhibitor model.
  1. Low efficacy
  2. Placebo relapse
  3. Suicidal ideation
  4. Symptom relapse
  5. Discontinuation syndrome
  6. Drug tachyphylaxis in general
- Describe strategies for effectively managing reuptake inhibitor-induced centrally acting monoamine depletion.
- Determine optimal serotonin or catecholamine starting points in patient management.
- Cite the impact of management decisions in response to inadequate serotonin and/or dopamine concentrations as the etiology of symptoms.
- Describe the impact of competitive inhibition interaction between the centrally acting monoamines.
- Describe the impact of conjugation interaction between centrally acting monoamines and thiols.
- Cite why L-dopa is the most effective Parkinson's disease treatment
- Describe carbidopa's mechanism of action and its potential impact on:
  1. Worsening Parkinson symptoms
  2. Parkinson death rate
  3. L-dopa tachyphylaxis
  4. Depletion of other systems
  5. Dyskinesias and choreiform movement
- Describe the published mechanism of action for Parkinson on/off effect.
- Describe functional status determination of the Organic Cation Transporters Type-2.
- Understand the process used to determine optimal appetite suppression efficacy in medical weight loss.
- Cite optimal positioning for each of the following in medical weight loss.
  1. Patient motivation enhancement
  2. Impact of time between office visits
  3. Calorie intake optimization
  4. Appetite control (suppression)
  5. Computers in weight loss
  6. Managing diseases affected by weight loss

**Criteria for Success**

Statements of credit will be awarded based on the participant's attendance and submission of the activity evaluation form. A statement of credit will be available upon completion of an online evaluation/claimed credit form at <http://akhcme.com/akhcme/pages/neuroresearch>. You must participate in the entire activity to receive credit. If you have questions about this CME activity, please contact AKH Inc. at [tbrignoni@akhcme.com](mailto:tbrignoni@akhcme.com).



**CME Credit provided by AKH Inc., Advancing Knowledge in Healthcare**

**Physicians**

This activity has been planned and implemented in accordance with the accreditation requirements and policies of the Accreditation Council for Continuing Medical Education (ACCME) through the joint providership of AKH Inc., Advancing Knowledge in Healthcare and NeuroResearch Company. AKH Inc., Advancing Knowledge in Healthcare is accredited by the ACCME to provide continuing medical education for physicians. AKH Inc., Advancing Knowledge in Healthcare designates this live activity for a maximum of 15 *AMA PRA Category 1 Credit(s)*<sup>™</sup>. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

**Physician Assistants**

NCCPA accepts *AMA PRA Category 1 Credit*<sup>™</sup> from organizations accredited by ACCME.

**Commercial Support**

Full notification of commercial support will be provided in the final program.

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