Title of the Symposium: WHAT IS NEW IN SLEEP APNEA AND GLUCOSE METABOLISM AND ENERGY BALANCE?

Chair: Esra Tasali, Co-Chair: R.Bergman

Speakers

R.Bergman: "Natural History of Type 2 diabetes"
C. O'Donnell: " Intermittent Hypoxia and Sleep Fragmentation: Evidence from Animal and Human Models"
P.Levy : "OSA and type 2 diabetes: how strong is the link?"
E.Tasali: "Impact of CPAP treatment of OSA on glucose control: evidence from randomized clinical trials"
N.Punjabi: "Changes in Weight and Energy Expenditure in OSA"

Session summary:

Sleep apnea and type 2 diabetes are two rising epidemics worldwide. Experimental models in animals and humans have demonstrated that intermittent hypoxia and sleep fragmentation, as occur in sleep apnea, exert adverse effects on glucose metabolism. Population and clinic-based evidence suggests that sleep apnea is independently associated with alterations in glucose metabolism and may place patients at an increased risk for the development of type 2 diabetes. Today, nearly 18 million of the 26 million diabetics are estimated to have sleep apnea, but the presence of sleep apnea is vastly under recognized.

This symposium included a multidisciplinary group of leading experts, who discussed the most recent clinical and translational evidence for altered in glucose metabolism and energy balance in sleep apnea. Novel data from animal and human models of sleep apnea and recent findings from randomized clinical trials on the effects of treatment of sleep apnea on glucose metabolism as well as evidence for changes in body weight and energy expenditure were presented. The underlying mechanisms that may link sleep apnea to insulin resistance and glucose intolerance were discussed.