THE ROLE OF FEMALE HORMONES IN BREATHING DISORDERS TO BE STUDIED BY SCRIPPS RESEARCHERS

LA JOLLA, CALIFORNIA June 23, 1993 -- Investigators at The Scripps Research Institute and Scripps Clinic and Research Foundation have been awarded a $492,000 three-year grant from the National Institutes of Health to study the effect of alcohol on breathing disorders in older men and women during sleep. Of particular interest is the possible prophylactic impact of female hormones on upper respiratory disorders that could lead to heart attack and stroke.

Previous research by the Scripps team has shown that moderate amounts of alcohol consumed by young men within two hours of sleep severely disrupts their breathing and increases the resistance to flow in their upper airway. The new study, which is funded by the NIH’s National Institute on Alcohol Abuse and Alcoholism, will focus on the influences of age and gender on respiration during sleep after alcohol ingestion at bedtime.

Merrill Mitler, Ph.D., research director for Scripps Clinic’s Sleep Disorders Center and a member of The Scripps Research Institute’s Department of Neuropharmacology, noted that the investigation of women is a major focus of the study.

"Female hormones seem to protect premenopausal women from sleep disordered breathing," he said. "But, postmenopausal women are not protected as such."
Another member of the research team, Arthur Dawson, M.D., a senior member of the Scripps Clinic Medical Group, said "younger women are less susceptible to sleep disordered breathing than their male contemporaries. Women also show less depression of their waking respiratory drive when they drink a small dose of alcohol. We expect that these gender differences will disappear when postmenopausal women are compared with older men."

He also noted that "we believe that older women on hormone replacement will show less effect of alcohol on their upper airway resistance and respiratory drive during sleep than we find in men of any age or in older women not on hormones."

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