American Urological Association MediaRoom

New Studies Highlight Benefits, Risks of Testosterone Therapy

New data also indicate who may benefit most from treatment

Orlando, FL, May 18, 2014 — Three new studies examining the predictors, effects and durability of testosterone therapy on men will be presented to reporters at the 109th Annual Scientific Meeting of the American Urological Association (AUA) during a special press conference in the Orange County Convention Center, Orlando, FL on Sunday, May 18 at 2:00 p.m. ET.

Testosterone, a hormone produced primarily in the testicles, helps maintain a man’s:

- Bone density
- Fat distribution
- Muscle strength and mass
- Red blood cell production
- Sex drive
- Sperm production

Testosterone therapy is used to treat men with clinically diagnosed testosterone deficiency, also known as hypogonadism. While hypogonadism can be associated with fatigue, erectile dysfunction, decreased muscle mass and even infertility, these symptoms may not always be related to low levels of this hormone. Men with these symptoms should consult with their physicians and undergo blood tests prior to starting testosterone replacement therapy.

Study Details

Exercise Improves the Effect of Testosterone Replacement Therapy and the Durability of Response After Cessation of Treatment (#MP48-02): Exercise may help sustain the positive effects of testosterone therapy even after treatment ends, according to a new study from Ansan Hospital and Seoul Paik Hospital in Korea. Fifty patients with late-onset hypogonadism and similarly sedentary lifestyles were enrolled and placed into one of two random groups prior to starting the 20-week study, which included 12 weeks of Testosterone Replacement Therapy (TRT) and eight weeks of follow-up without therapy. One group was offered a supervised physical activity program concurrent with TRT therapy for the duration of the study while the other received TRT alone. Throughout the study, improvements were seen in both groups, with total serum testosterone levels significantly increased at 12 weeks; however, greater increases were seen in the exercise group. This group also showed more sustained improvements in symptoms following the cessation of TRT. In particular, 72.2 percent of patients in the exercise group reported improvements in erectile function at the conclusion of the study, compared to 45.5 percent of the non-exercise group, leading researchers to conclude, the combination of exercise and TRT offers significant improvements in testosterone levels and late-onset hypogonadism symptoms, which can be well sustained with continuous exercise even after the cessation of TRT.

Long-term Testosterone Treatment Leads to Progressive Weight Loss and Waist Size Reduction in Hypogonadal Men (#MP48-01): Obesity and other metabolic disorders may be related to low levels of testosterone and restoring hormone levels may improve these conditions in some men, according to a new study from researchers in Germany and the United States. Using data from a prospective registry of 261 men (ages 32 to 84) with low testosterone (<12nmol/L), researchers examined 164 men for five years of testosterone therapy. After five years of follow up, the men had experienced statistically significant weight loss (mean weight decrease from 104.23 kg to 92.49 kg), decreases in body mass index (average 33.17 to 29.44) and waist circumference (average 108.61 to 99.03) as well as changes in total cholesterol, glucose and blood pressure levels.

Predictors of Poor Response to Transdermal Testosterone Therapy in Men with Metabolic Syndrome (#MP48-04): A new study from Weill Cornell Medical College in New York indicates men with diabetes and obesity may have less success with TRT than men without these conditions. Researchers reviewed 58 patients, with 32 having a BMI of less than 30 (non-obese) and 26 with a BMI greater than 30 (obese). All 58 patients were of similar age, with similar baseline hormone levels. At the end of the study period, 81 percent of non-obese men had achieved normal testosterone levels, compared to 52 percent of obese men (P=0.03). Total testosterone levels were 81 percent and 54 percent, respectively, suggesting that metabolic conditions may impact the efficacy of TRT.

“In the right patients, TRT can significantly improve symptoms,” said Tobias S. Köhler, MD, MPH, FACS; session moderator and associate professor & residency program director with Southern Illinois University School of Medicine. “However, as these studies show, not all men may be good candidates for this therapy. It’s extremely important for men to talk with their doctors about the benefits and risks of this therapy.”
NOTE TO REPORTERS: Experts are available to discuss this study outside normal briefing times. To arrange an interview with an expert, please contact the AUA Communications Office at 410-689-3932 or e-mail cfrey@AUAnet.org.

About the American Urological Association: The 109th Annual Meeting of the American Urological Association takes place May 16 – 21 at the Orange County Convection Center in Orlando, FL.

Founded in 1902 and headquartered near Baltimore, Maryland, the American Urological Association is a leading advocate for the specialty of urology, and has more than 20,000 members throughout the world. The AUA is a premier urologic association, providing invaluable support to the urologic community as it pursues its mission of fostering the highest standards of urologic care through education, research and the formulation of health policy.

Contact:
Christine Frey, AUA
410-999-7091
Cfrey@auanet.org