DHEA Helps Some Aspects of Addison’s Disease

By MIRIAM E. TUCKER
Senior Writer

MEN with erectile dysfunction should be screened for thyroid disease before any ED-specific treatment is prescribed, researchers concluded based on a study of men treated at a thyroid clinic in Greece. Among men with ED in whom thyroid dysfunction is identified and treated, specific ED treatment with selective androgen receptor modulators and which does not improve with glucocorticoid and mineralocorticoid treatment.

The study included 71 men (mean age 71 years) who presented to a thyroid clinic, 27 of whom had clinical hyperthyroidism (18 with Graves’ disease, 9 toxic nodular or multinodular goiter) and 44 with clinical hypothyroidism, including 37 with positive thyroid antibodies, who reported online in the Journal of Clinical Endocrinology and Metabolism (doi:10.1210/jc.2007-1760).

None of the patients were on thyroid medication prior to the study. Patients with diabetes, cardiovascular, or urologic disease were excluded, as were those with abnormal levels of total testosterone or sex hormone binding globulin. A similar number of age-matched normal men were recruited as controls.

All of the subjects filled out the validated Sexual Health Inventory for Males (SHIM), a five-item questionnaire that assesses a man’s ability to attain and maintain an erection. Scores of 21 or less, indicating some degree of ED, were found in 79% of the men with thyroid dysfunction (19 were hyperthyroid and 37 were hypothyroid), compared with 34% of the controls, a significant difference.

Among the men with any degree of ED, 38% of those with thyroid dysfunction had SHIM scores of 10 or less, indicative of severe ED, compared with 25% of the controls. Of the 21 patients with severe ED, 8 were hyperthyroid and 13 hypothyroid. There was no difference in SHIM scores between hyperthyroid and hypothyroid patients. In the patients with hypothyroidism, SHIM scores correlated positively with free thyroxine (FT4) levels and negatively with thyroid-stimulating hormone (TSH) levels. In contrast, SHIM scores did not correlate with either FT4 or TSH levels in patients with hyperthyroidism, Dr. Kranas and his associates reported.

Scores on the SHIM improved significantly at 1 year after treatment of the thyroid dysfunction: Only 20 of the patients—7 with hyperthyroid and 13 hypothyroid—still had SHIM scores of 21 or less, and of those, only 7 had severe ED (SHIM less than 10), proportions similar to those among the controls.

In addition, no difference was found between hypothyroid patients having positive thyroid antibodies and those with negative antibodies. When patients with Graves’ disease and those with nodular or multinodular toxic goiter, they said.

Ultrasound Helps Identify Bone Defects in Women With Type 2 Diabetes

By JOHN R. BELL
Associate Editor

Ultrasound findings from a cross-sectional study of 162 postmenopausal women might help explain the paradox that women with type 2 diabetes can have higher bone mineral density than nondiabetic women and yet have a greater risk of fractures.

The study confirmed previous reports that bone mineral density (BMD) as measured by dual x-ray absorptiometry (DXA) is higher in women with type 2 diabetes than in women without diabetes. Yet a new diagnostic tool, quantitative ultrasound, revealed that the speed of sound through bone was lower in diabetic women.

This may indicate that their denser bone is in some way of lesser quality, compared with the bone of women without type 2 diabetes. The findings suggest that quantitative ultrasound is a useful tool in detecting impaired bone quality in postmenopausal women with type 2 diabetes, and that it might have greater promise than DXA in detecting bone defects in diabetic patients, the authors wrote.

Dr. Bei Tao of Shanghai Jiao Tong University School of Medicine and colleagues enrolled 76 postmenopausal women with type 2 diabetes and 86 nondiabetic postmenopausal women. In the diabetic women, BMD at each site correlated significantly with the speed of sound measurements. But among the diabetic women, only the speed of sound at the phalangeal site correlated significantly with all three BMD values, the speed of sound in the tibia correlated with none of the BMD values, and the speed of sound in the radius correlated with only the BMD of the femoral neck.

Drug Washout Period at the End of the Study

But only two parameters of psychological status showed a mean improvement that was statistically significant relative to placebo. One was the role-emotional dimension of health on the Short Form-36 when measured at 12 months, and the other was the mental fatigue portion of the Multidimensional Fatigue Inventory—20 when measured at 6 months. By 12 months, there was no significant difference in the mental fatigue portion, however.

The fact that the study documented improvement in psychological status with DHEA treatment, together with a decline when treatment had been stopped for a month, indicated that there probably was some definite improvement, even if it was not statistically significant.

One of the largest differences seen in a psychological parameter at the beginning of the study was in the self-esteem component, a pattern that has been documented in other studies. It suggests there may be a specific psychological abnormality profile associated with Addison’s disease.

Regarding side effects, 64% of 31 women on DHEA developed skin spots, 45% noted greasy skin, and 58% reported an increase in axillary hair. There were no observed changes in libido or sexual function in either gender.

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