trolled trial data, the task force did not make a recommendation on treating men with prostate cancer who have been disease free for 2 years or more.

For HIV-infected men who have low testosterone levels and weight loss, the task force members suggested short-term testosterone therapy as an adjunctive approach to promote weight maintenance and improvements in lean body mass and muscle strength.

Monitoring

The task force recommended a standardized monitoring plan with evaluation and measures of testosterone levels at 3 months after initiating treatment and annual assessments.

Hematocrit should be measured at baseline, 3 months, and annually, the task force recommended. If hematocrit exceeds 54%, therapy should be stopped until hematocrit decreases to a safe level. Therapy can be restarted at a lower dose, but evaluations for hypoxia and sleep apnea should be conducted.

The task force recommended urologic consultation if there is a verified serum or plasma PSA concentration of more than 4.0 ng/mL or an increase in serum or PSA concentration of more than 1.4 ng/mL in any 12-month period. ∎

Low Testosterone May Up All-Cause Mortality Risk

BY MARY ANN MOON
Contributing Writer

Men with low testosterone levels appear to be at increased risk of death from all causes and to have shorter survival times than men with normal testosterone levels, reported Dr. Molly M. Shores of the departments of psychiatry and behavioral sciences at the University of Washington, Seattle, and her associates.

In a recent small study, the researchers had unexpectedly found that men with a low testosterone level had higher 6-month mortality than did those with a normal level who were of similar age and had comparable medical morbidity. "Given these unforeseen preliminary findings, we conducted the present retrospective cohort study to examine if repeatedly low serum testosterone levels were associated with increased mortality in a larger sample of middle-aged and elderly men with a longer follow-up, of up to 8 years," they said.

Dr. Shores and her associates identified in a clinical database 858 male veterans, aged 40 years and older, who had undergone at least two measures of testosterone levels between 1994 and 1999 and had then been followed for a mean of 4.3 years. They matched the data on these subjects with data in a national Veterans Affairs death registry to obtain mortality information.

The reasons why these men had undergone testosterone testing were not available for analysis, but previous research has shown that, in general, the most common clinical indications are evaluation of sexual dysfunction, osteoporosis, genitourinary conditions, and endocrine conditions, the investigators said (Arch. Intern. Med. 2006;166:1660-5).

A total of 452 men—53% of the study population—had normal serum testosterone levels (defined as 250 ng/dL or higher), or normal free testosterone levels (defined as 0.75 ng/dL or higher). Another 240 men (28%) had equivocal levels, and 166 (19%) had low levels.

Because testosterone levels are known to decrease with both acute and chronic illness, the prevalences of chronic obstructive pulmonary disease, HIV infection, coronary artery disease, and hyperlipidemia were noted. There were no significant differences between the men with normal testosterone levels and those with low testosterone levels regarding these disorders or overall medical morbidity.

All-cause mortality was 20% in men with normal testosterone levels and 25% in those with equivocal levels, compared with 35% in men with low levels. After the data were adjusted to account for the covariates of age, race, body mass index, and other clinical factors, "low testosterone level continued to be associated with an increased mortality risk of 88% greater than in men with normal testosterone levels," Dr. Shores and her associates said.

To control for the confounding influence of possible acute illness, the researchers conducted a further analysis excluding all subjects who died within 1 year of having their testosterone levels measured. In this subset of subjects, low testosterone levels were still associated with a 68% greater mortality risk, compared with normal levels.

The findings do not show that low testosterone levels directly raise mortality risk, because "a retrospective cohort study cannot establish a causal relationship," they cautioned. ∎

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