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COVER STORY

Hormonal Rejuvenation for Men

How men can safely use testosterone to restore libido

The November 1999 issue of Life Extension magazine featured an in-depth article on the importance of maintaining a youthful level of free testosterone in men over age 40. The article documented how testosterone deficit is an underlying cause for many degenerative diseases that affect aging men. The medical disorders related to testosterone deficit include depression, coronary artery disease, elevated cholesterol, abdominal weight gain, cognitive deficit, fatigue, immune dysfunction and many other diseases associated with "growing old."

Drug therapies are available to correct hormone imbalances that men experience as they age past 40. This month, we discuss some of these therapies and also introduce a natural approach that may enable men in later life to avoid testosterone drugs. While there are bountiful health benefits attributed to restoring youthful hormone balance, the emphasis of this article will be on rejuvenating sexual desire, function and gratification that is often lost as a consequence of aging.



The role testosterone plays in the body

As testosterone levels decline, it becomes more difficult for the aging male to become aroused by sexual stimuli. Middle-aged men with testosterone deficiency often complain that it takes a sustained level of arousal to enable them to perform, whereas in their younger years, the slightest sexual image would suffice. Men with testosterone deficit often complain of a depressed mood that precludes them from even fantasizing about sex. Restoring proper hormone balance can alleviate some forms of depression and rejuvenate the sex lives of many aged men.

In the late 1930s, researchers gave testosterone-like drugs to testosterone deficient men and observed a remarkable restoration of sexual arousal and activity. Despite the obvious benefit, these synthetic testosterone drugs produced unwanted side effects that precluded their long-term use.

Today, men have access to natural testosterone therapies that restore youthful hormonal levels, without inducing the side effects associated with older drugs. Innovative physicians are using natural testosterone patches and creams to reawaken their male patients' interest and motivation for sex. As would be expected, testosterone restoration makes it easier for men to become physically motivated and helps improve the quality and duration of their sexual episodes.

Testosterone's effects on libido

Sexual stimulation begins in the brain when neuronal testosterone-receptor sites are prompted to ignite a cascade of biochemical events that involve testosterone-receptor sites in the nerves, blood vessels and muscles. Free testosterone promotes the initial sexual urge and then facilitates performance, sensation and the overall degree of satisfaction.

Without adequate levels of free testosterone, the quality of a man's sex life is impacted, and the genitals atrophy. When free testosterone levels are restored to youthful levels, positive changes in structure and function of the sex organs can be expected.

Clinical studies on testosterone drugs

Human studies show that replacing testosterone by itself results in improvements in sexual thoughts, desire, performance and overall satisfaction in men with low blood levels of testosterone.

Since natural testosterone cannot be patented, early studies sponsored by drug companies often tested only synthetic testosterone drugs. One study compared the effects of testosterone enanthate to placebo in men aged 32-65 who had low blood testosterone and erectile difficulties. The men were injected every four weeks for a period of five months.

The study's encouraging results show that those suffering from erectile disorders with low testosterone can benefit enormously from testosterone boosting therapy.¹

Another study evaluated testosterone deficient men ranging in age from 21 to 65 using a synthetic testosterone drug or a natural testosterone patch. The men rated their sexual desire and arousal at the beginning of the study and were then injected with the synthetic testosterone drug. A significant improvement in desire and arousal occurred for three weeks, but then rapidly dissipated as the effects of the single testosterone injection wore off. These men were then prescribed a natural testosterone patch Androderm (tm) for 12 months. With daily application of the natural testosterone patch, libido returned to about the same level as the testosterone injection. The mean number of erections per week increased from 2.3 to 7.8 as a result of natural testosterone treatment. Dramatic improvements in erectile duration and rigidity were reported and the Mean Erectile Index showed a 50% improvement in response to natural testosterone replacement therapy. The improvement in sexual desire and arousal remained throughout the entire 12-month test period using the natural testosterone patch.²

The effects of testosterone replacement occur very fast. In one study, four out of five men reported improved sexual function within two weeks after initiating therapy with a low-dose natural testosterone patch. The fifth man reported improvement after being switched to a higher dose of natural testosterone.³

Another study using a slow-release form of natural testosterone showed that sexual function returned to normal in seven out of eight men who had low blood testosterone and complained of sexual dysfunction.⁴

Early studies on the effects of synthetic testosterone drugs left no doubt that loss of libido directly correlates with a testosterone deficit. In a study published in 1944, 38 men who complained of many symptoms related to aging were evaluated. Impotence was present in 32 of these men. In response to administration of a synthetic testosterone drug, 17 out of 20 men with low testosterone who complained of sexual dysfunction experienced a complete return to normal. When doses of testosterone were increased, the sexual vigor of these men (who initially presented with low testosterone) exceeded that of normal men. When testosterone therapy was discontinued, all symptoms of pre-mature aging returned including loss of sexual potency until treatment was restarted. This study revealed that in men with normal testosterone levels, testosterone therapy did not alleviate symptoms of aging and sexual dysfunction.⁵

What these doctors may not have known is that when testosterone is administered to a man with normal levels, the excess testosterone will often convert into estrogen. That is why it is so important to follow a program that suppresses the enzyme aromatase, which causes testosterone to be converted into too much estrogen. There are now natural aromatase-inhibiting nutrients available without a prescription.

In the early 1960s, a physician named Tiberius Reiter published the results of 12 years of experience using testosterone replacement therapy in 240 men (aged 40-75 years) who complained of pre-mature aging. The results showed that after two to four months of testosterone administration, significant improvements occurred in the areas of depression, impotence, urinary disturbances and other aging-related disorders.⁶

In a more recent 10 year study on 1000 men ranging in age from 31 to 80 years, Malcolm Carruthers, M.D. published the results of administering testosterone to those with symptoms of premature aging. These symptoms included depression, fatigue, irritability, aches, pain, etc. In 90% of these men displaying pre-mature aging symptoms, loss of libido or impotence was also reported. Dr. Carruthers treated all of these men with various forms of testosterone, and he reports that all men so treated experienced "an overall feeling of increased vitality and well-being." Dr. Carruthers went on to describe less depression and irritability and increased drive and assertiveness. As it relates to sexuality, the men receiving testosterone therapy reported penile enlargement, increased genital sensitivity and major increases in total sexual activity, including both intercourse and masturbation. Dr. Carruthers stated, "When adequate testosterone therapy is given, all the symptoms of andropause (male menopause) disappear within a few weeks or months, including erectile difficulties, particularly when other factors (such as lifestyle changes) contributing to its onset or continuation are dealt with."⁷

In a controlled study, 13 healthy men aged 57 to 76 years with low or borderline low blood testosterone were administered testosterone therapy at the University of Washington. The men received either testosterone or placebo for three-month time periods. The men were not supposed to know when they were receiving testosterone or a placebo, but at any given time, 12 out of the 13 were able to ascertain they were receiving testosterone based on increases in their libido, aggressiveness in business transactions or an improvement in their sense of well-being.⁸

As previously stated, since natural testosterone cannot be patented, the early studies used patented synthetic testosterone drugs. The newer studies are confirming that natural testosterone is as effective as synthetic testosterone drugs and does not produce side effects. There are now FDA-approved natural testosterone patches, unapproved natural testosterone creams sold by compounding pharmacies, and FDA-approved aromatase-inhibiting drugs to block the conversion of testosterone into estrogen. Readers will be pleased to know that there are nutritional approaches that have been recently identified as being effective in boosting free testosterone levels and suppressing excess estrogen. While clinical trials of these nutritional therapies are ongoing, the results of pilot studies are encouraging.

Plan of action

Most middle-aged and elderly men should consider taking steps to increase their free testosterone levels and suppress excess estrogen. Men with existing prostate cancer should not seek to increase their testosterone levels or suppress their estrogen levels.

There are natural testosterone patches and creams that can be prescribed by your doctor. While these are classified as prescription drugs, they are safe for most men to use.

Blood tests are extremely useful in determining testosterone and estrogen levels and helping to rule out existing prostate cancer. Remember, while the preponderance of evidence shows that elevating testosterone in healthy men does not increase the risk of prostate cancer, those with prostate cancer should not use any therapy that might boost their testosterone levels.

There are natural plant extracts that have been shown to favorably alter hormone metabolism in the aging male and improve libido. Ongoing research is providing evidence to substantiate the hormonal changes that can be expected when properly using these nutrients. The following article describes herbal extracts that can favorably alter testosterone/estrogen levels in the aging male.

Note: Natural testosterone patches and creams and other prescription drug therapies are more fully described in the November 1999 issue of Life Extension magazine, and can be accessed from The Foundation's Website at www.lef.org. On the home page, click on "Disease Therapies," then scroll up the menu to "Male Hormone Modulation Protocol."

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