



THE MALE ANDROPAUSE



Sangeeta Pati MD., FACOG

*President & Medical Director of SaJune Medical Center & Medical Spa
Faculty I.W. Lane College Integrative Medicine:
Board Certified American Board of Obstetrics and Gynecology;
Board Certified American Board of Anti-Aging Medicine.*

Although, the male **andropause** has not been widely recognized, increased medical research has turned attention to the gradual hormone decline in males which generally presents with symptoms in the mid 40's to 50's. A recent World Health Organization (WHO) report, states that the male hormone, testosterone, drops about 10 percent every decade starting around age 30. It is estimated that by age 50, 30 percent of men have testosterone levels low enough to cause symptoms and put them at risk.

Hormonal decline is not limited to just testosterone. Other natural hormonal levels can be deficient in Andropause. These hormones can include Human Growth Hormone (HGH or IGF-1), DHEA, thyroid hormone, melatonin and others. Although, declining hormones are a normal part of aging, they are accompanied by a gradual and undesired decline in sexuality, mood and overall energy. Declining hormones also increase the risk of more serious medical conditions (such as cardiovascular disease and osteoporosis).

Similar to Menopause in women, Andropause in males begins at a time when life often offers some of its greatest rewards. This article has been designed to arm you with information about Andropause - what causes it, how to diagnose it and what you can do to maintain a healthy and active quality of life throughout your middle years.

What are the symptoms?

By the time men are between the ages of 40 and 55, the drop in hormone levels *gradually* (unlike the sudden changes in menopause) produce changes in attitude, mood, confidence, memory, energy level, sex drive, muscle tone, muscle mass, muscle strength, abdominal fat and physical agility. Psychological stress, alcohol, injuries, surgery, medications, and obesity can contribute to its onset.

More over, studies show that a decline in testosterone and growth hormone actually contributes to the risk of health problems like heart disease, osteoporosis and weak muscles leading to frailty. Since all this happens at a time of life when many men begin to question their values, accomplishments and direction in life, it's often not recognized that the changes are related to a silent decline in hormones.

What are the risks of hormone deficiencies?

Since all cells in the body have receptors for hormones, declining hormones are a major contributor to deterioration of the brain, muscle, skin, bone, joints, vessels, heart and the quality of life. Each hormone has specific roles in the normal bodily functions. Specifically, testosterone builds protein and is essential for normal sexual behavior and producing erections. Additionally, each hormone affects numerous metabolic activities such as the production of blood cells in the bone marrow, bone formation, lipid metabolism, carbohydrate metabolism, liver function, brain function, prostate gland growth. Therefore, in addition to the symptoms described, declining hormones increase the risk of deterioration of organs , osteoporosis and cardiovascular disease.

Andropause and Osteoporosis

Osteoporosis is not just a disease of women. In men, lifestyle, nutrition and hormones such as testosterone and growth hormone play critical roles in the maintenance of bones. As these decline, between the ages of 40 and 70 years, male bone density falls by up to 15 percent. What's more, approximately one in eight men over age 50 actually have osteoporosis, increasing fractures of the hip, wrist and spine. Therefore, the incidence of hip fractures rises exponentially in ageing men, as it does in women, but starting about 5 to 10 years later.. After a hip fracture, up to one third of patients never regain full mobility.

Andropause and Cardiovascular risk

It is now well accepted that women's risk of atherosclerosis (hardening of the arteries) and cardiac events increases after menopause. New evidence suggests that a similar phenomenon occurs in men as their testosterone levels diminish with age. Research thus far point to a strong association between low-testosterone levels and an increase in cardiovascular risk in men.

How do you know if you are in Andropause?

Although, Andropause was first described in medical literature in the 1940's, it is generally under diagnosed and under treated since sensitive tests are new. Under diagnosis is also due to often vague symptoms which can vary a lot among individuals. Some men find it difficult to admit that there's even a problem. And often physicians do not think of low hormone levels as a possible culprit, attributing symptoms to medical conditions and normal aging.

Accurate diagnosis and treatment requires a thorough clinical history, physical evaluation and lab work to measure hormone levels.

How do you treat Andropause ?

Of course, any strategy to reduce the symptoms and risks of Andropause should be based on lifestyle approaches such as optimal diet, regular exercise, nutritional replacement, stress-management and the reduction of tobacco and alcohol intake. These critical factors affect hormone levels and effects.

Additionally, hormone replacement (i.e. testosterone, growth hormone, thyroid hormone, melatonin) should be considered for those who are experiencing clinical symptoms of hormone deficiency. No patient is too old to start hormone replacement therapy if it is indicated. As for any medication, hormones should be taken under a physician's care, with appropriate follow-up evaluations. They are dispensed by injection, creams, gels, patches and oral capsules. If you have an established prostate tumor or breast cancer you would not be a suitable candidate for testosterone replacement therapy.

What is the role of Viagra/ Cialis in Andropause?

Testosterone replacement therapy works differently from Viagra or Cialis, which act on the penis only to maintain an erection. Testosterone works on the whole body, brain and all aspects of the sexual response including erectile quality and sexual desire.

What are the benefits of hormone replacement?

Clinical studies support the use of exercise, nutritional replacement, testosterone and growth hormone to treat the symptoms and prevent disease. Hormone replacement with testosterone and growth hormone has been shown to significantly improve sexual performance, libido, energy, mood, memory, brain function, heart disease, vessel disease, muscle strength, muscle tone, muscle mass, abdominal fat, bone density and overall sense of well-being. These effects are usually noted within just a few weeks.

What are the risks of hormone replacement?

A recent 2004 study in the New England Journal of Medicine concluded that there were no long term risks of replacement therapy which aims to restore normal hormone levels. Historically, testosterone use has been associated with aggression and hypersexuality. These effects stem from the use of testosterone by men with normal testosterone levels who took testosterone at doses which were much higher than supplementation doses that are used in men going through Andropause.

In conclusion, correction of nutritional and hormonal deficiencies is important for the treatment of andropause symptoms and the prevention of degenerative diseases such as osteoporosis and cardiovascular disease.

Benefits

T improves cognitive function, memory, Alzheimer's (Aging Male 2003, J Clin Metab 2002, J Clin Endocrin 1999)

J Endocrin 2003, J CLin Endocrin 1999 T protects against atherosclerosis and plaque rupture,

J Neuroscience 2001 GH protects against beta-amyloid plaques

T protects against CV dz NEJM 2004

T improves mood and erections Androl 1992

T improves depression Am J Psychiatry 2003

T reduces angina Circulation 2000, reduces atherosclerosis J Endocrin2003, improves CHF Heart 2003

Improves strength and body comp Mayo Clin Proc 200, improves DM Aging Male 2003

T increase coronary blood flow circulation 1999

GH increases bone density

GH decreases abdominal obesity in men

GH decreases fatigue

Increases energy, vitality, well being, self control decreases anxiety, depression

No evidence of increased cancer or CV dz NEJM 2004

Body composition improves

- Improvement in mood and sense of well-being
- Increased mental and physical energy
- Decreased anger, irritability, sadness, tiredness, nervousness
- Improved quality of sleep
- Improved libido and sexual performance
- An increase in lean body mass, a decline in fat mass
- An increase in muscle strength (hand grip, upper and lower extremities)
- Potentially, a decrease in the risk of heart disease

Understanding Risks

There are several conditions in which you should never use testosterone replacement therapy. These include:

- Breast cancer (in males)
- Prostate cancer

In some other cases testosterone replacement therapy may not be right for you. If one of the conditions below is applicable to you, your doctor will decide whether (in your specific case) testosterone replacement therapy is the right solution.

- Liver disease
- Heart or blood vessel disease
- Edema (swelling of face, hands, feet, or lower legs)
- Enlarged prostate
- Kidney disease
- Diabetes mellitus

To help your doctor determine your best treatment plan, you should also discuss the following:

- If you have ever had any unusual or allergic reaction to androgens or anabolic steroids.
- If you are an adult male who plans to have children; high doses of androgens may cause infertility.
- If you are bedridden.
- If you are now taking **any** other prescription or nonprescription (OTC) medicine, especially anticoagulants (blood thinners).

Treatment for Andropause consists of replacing lost hormones with natural hormones that are molecularly equal or bio-identical to those produced naturally within the body. By choosing hormones from sources that are bio-identical to our own bodies naturally produced hormones, one can receive the optimal benefits of therapy while reducing the risks associated with chemical agents.

Books

The Andropause Mystery: Unraveling Truths About the Male Menopause

by: Robert S. Tan

AMRED Publishing, January 2001

Sex For Life: The Lover's Guide to Male Sexuality

Chapter 4 - Male Menopause: It's Real and It's Preventable

by: Dr. David Saul

Apple Publishing, 1999

Male Sexual Fitness: Causes and Solutions for Andropause (Good Health Guides)

by: Dr. Eric R. Braveman

McGraw Hill – NTC, March 1999

Understanding Men's Passages: Discovering the New Map of Men's Lives

by: Gail Sheehy

Random House, May 1999

The Testosterone Solution: Increase Your Energy and Vigor With Male Hormone Therapy

by: Dr. Aubrey Hill

Prima Publishing, January 1998