

READE'S REVIEW

JAMES D. READE, D.C., PLLC

Special points of interest:

- **Andropause - "Male Menopause"**
- **Male Hormone Physiology**
- **Signs of Andropause**
- **Other Factors Leading to Andropause**
- **Testosterone Replacement**
- **Natural Treatment for Andropause**

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ANDROPAUSE - "MALE MENOPAUSE"

From a strict medical standpoint andropause is defined as a loss of androgen dominance. What exactly does that mean? Androgens are hormones such as testosterone which are naturally found in higher quantities in the male gender. When a man loses his "androgen dominance" this simply means that he has low testosterone or as you may have heard, "low T". However, this could also mean that someone could have a "normal" testosterone level but increased estrogen levels and therefore no longer has a dominance of testosterone or other androgens. So, that is the technical definition, but what does andropause look like and how would someone know if they have symptoms of andropause?

SYMPTOMS OF ANDROPAUSE:

1. Decreased libido
2. Increased body fat especially around the abdomen
3. Loss of muscle strength, size and ability to gain muscle mass

4. Erectile dysfunction
5. Mood disturbances, including depression, irritability, loss of drive/ambition and fatigue
6. Sleep disturbances
7. Bone loss/osteoporosis
8. Night sweats, sleep apnea
9. Male breast development
10. Enlarged prostate
11. Increased cardiovascular/heart problems

The problem with identifying andropause is that in men the changes are very gradual and may develop over several years unlike in women where menopause can develop within months. Often many men chalk up these changes to "I am just getting older". They often ignore chronic fatigue or are embarrassed by their lack of interest in sex or sexual performance. It is sad because a simple salivary test is a great tool to detect andropause and it only takes minutes to collect a sample. There are also some blood tests that can be performed as well.



It is estimated that 30 million American males from ages 35 through 70, suffer from some degree of andropause. 30% of men 60-70 years and 70% of men 70-80 years of age have low available levels of testosterone. 60% of men 40-59 years have enlarged prostates. One out of two men between the ages of 40-60 will experience andropause!

Five of the main causes of death in men are heart disease, stroke, diabetes, suicide and Alzheimer's. It is interesting that many of these diseases can have some of their causation due to lack of androgen or testosterone dominance. Andropause potentially has huge health effects on men especially as they age. Most men should be evaluated for this condition before serious health conditions develop.

MALE HORMONE PHYSIOLOGY 101

Both male and female hormones originate with a fat called cholesterol. This much maligned fat is vitally important in numerous functions in the human body and particularly important in sexual and other hormonal production. Those men on cholesterol reducing medications (statins) should be aware that these medications can potentially reduce testosterone levels. This is important because, proper testosterone levels actually reduces cardiovascular problems. Jonathan Wright, M.D. stated, "Most physicians practicing in the country today completely ignore the role of testosterone in maintaining men's cardiovascular health". What is in-

teresting is that the heart has more receptor sites for testosterone than any other muscle in the body.

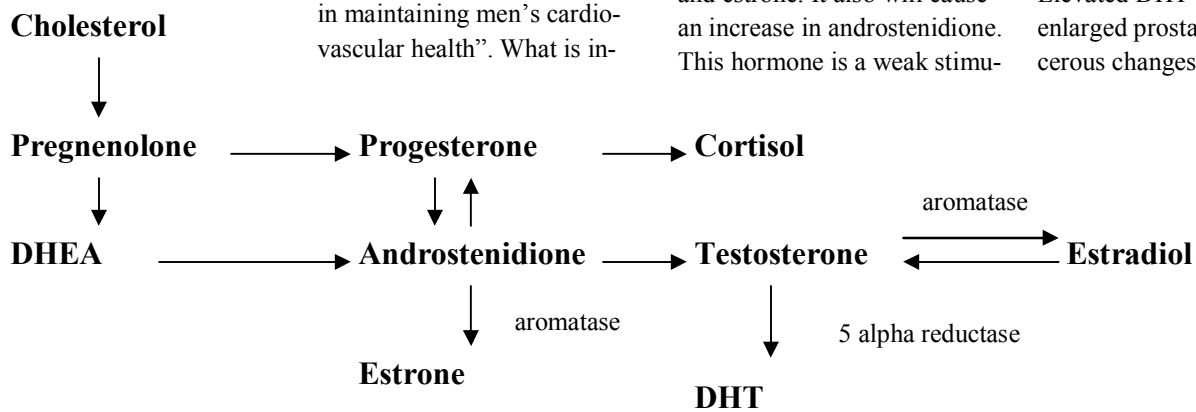
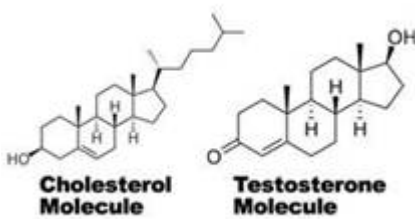
Insulin resistance (IR), diabetes, poor diet, excessive mental stress can also lead to low testosterone. A phenomenon called pregnenolone steal will cause the body to produce more cortisol (stress hormone) rather than testosterone.

IR also has significant effects on different enzymes like aromatase. In men with IR aromatase activity increases and will produce more "female hormones" such as estradiol and estrone. It also will cause an increase in androstenedione. This hormone is a weak stimu-

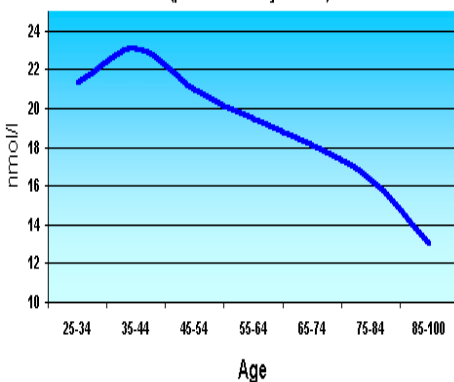
lator but will strongly block testosterone from stimulating your cells. The net effect is like having low testosterone levels.

Testosterone production is also regulated by a hormone released by a part of your brain called the pituitary gland. The hormone is called leutinizing hormone (LH). The levels of LH can decrease when there is an increase in estrogen in men. The result is lowered testosterone.

Lastly, a lack of zinc, essential fatty acids and elevated estrogen can cause increased DHT. Elevated DHT can lead to enlarged prostate and precancerous changes in the prostate.



TESTOSTERONE (plasma levels by decade)



SIGNS OF ANDROPAUSE

Below are some signs of andropause:

1. Increased total cholesterol and triglycerides
2. Decreased HDL or "good" cholesterol
3. Elevated fasting blood sugar
4. Elevated blood pressure
5. Unexplained mid-section weight gain
6. Increase in fat distribution in breast and hips
7. Development of varicose veins or hemorrhoids
8. Changes in visual acuity
9. Increased arterial plaque, increased blood clotting
10. A ratio of testosterone to estrogen in normal men is 50:1 with full blown andropause the ratio is 8:1

Changes in hormone dominance has huge effects in men and their health. Plainly, there is a complex web of hormones and organs that regulate our health. It is best to balance your body naturally.

OTHER FACTORS EFFECTING TESTOSTERONE

It is important to note that many men experience a 1-2% decrease in available free fraction testosterone after age 35-40. Most hormones circulate in the blood stream attached to a protein and others are not attached which is the free fraction. The two together form the total amount of hormone. The free portion is the actual active form of the hormone. As men age there is more of this protein that attaches to the hormone so there is less active hormone as we age even though the total levels are normal. Increasing estrogen levels will help increase the binding to the protein. This is another good reason to decrease estrogen in men.

Blood sugar imbalance and adrenal stress syndrome dramatically influences testosterone levels by effecting several enzymes with the result being increased estrogens and decreased testosterone levels.

Gastrointestinal dysfunction can also have significant ef-

fects especially on estrogen levels. There is an enzyme in the gut that separates estrogen from it being bound. Normally the liver removes the extra estrogen in this bound form into the gut via the bile. However, without proper fiber and probiotics this enzyme increase its activity and causes more estrogen to be unbound. This essentially raises estrogen levels in the gut and then into the bloodstream.

Vitamin B-6 has been found to reduce tissue hypersensitivity to estrogen. With a deficiency of B-6 the cells overreact to estrogen and display symptoms of estrogen dominance even though the blood levels are normal. An active form of B-6 called pyridoxal-5-phosphate is recommended.

Proper liver detoxification is vitally important to maintain proper hormonal balance in men and in women. Proper levels of B vitamins, zinc, antioxidants, cruciferous vegetables and other compounds

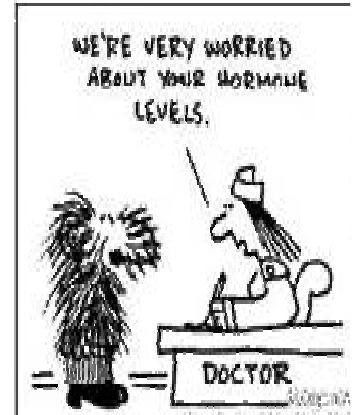
are essential for the liver to eliminate and process hormones.

Caffeine has a number of impacts on andropause at multiple levels. Caffeine acts as a stimulant to the adrenal which can promote over-activity and result in the pregnenolone steal we discussed earlier. The liver's ability to detoxify is compromised by caffeine.

Lastly, caffeine can effect the health of the gastrointestinal tract. If a patient suffers from andropause and is not willing to stop their intake of caffeine they will respond very slowly. Remember, that decaffeinated coffee contains about 60% of the original caffeine.

Antifungal, thiazide diuretics and other heart medications actually slow down testosterone production and can also block the effects of testosterone on the cell.

Lastly, there are compounds found in our environment called xenoestrogens that can also lead to andropause.



Blood sugar imbalance and adrenal stress syndrome dramatically influences testosterone levels...

SYNTHETIC OR BIOIDENTICAL TESTOSTERONE

A very simplified approach to resolving low testosterone is simply offer testosterone in a pellet, tablet, patch or gel. The logic is if T is low, why not just give additional testosterone? If someone has problems with the aromatase enzyme, if given more testosterone they will simply convert more of this into estradiol which will worsen their problems. However, most of the

time there are other physiological reasons that a patient's testosterone is low or imbalanced. It is better to find the original factors leading to andropause and rebalance the body. Simply giving a synthetic or bioidentical is not the answer. These hormones also have a tendency to accumulate in the tissues and may show normal on a simple blood test. This accumulation eventually

causes the cells not to respond to the hormones and become insensitive requiring more hormone to get the same result.

These hormones also have side effects, excessive red cell counts, increased clotting, increased prostate growth, decreased sperm production, fluid retention and liver toxicity.





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Bringing you Natural Healthcare Information

.Our mission is to help inform and educate the public about alternative treatments that are less invasive and employ more natural therapeutics. We in no way are suggesting that regular medical treatments should not be sought and with some conditions we will suggest a referral to the appropriate specialist.

We wish to provide hope to those people suffering and especially to those with chronic conditions. It is our purpose to provide you with knowledge that is helpful and can provide better health.

NATURAL TREATMENTS FOR ANDROPAUSE

Avoiding fast foods, refined carbohydrates, white sugar, partially hydrogenated fats, fried foods, and caffeine are highly recommended. Instead your diet should contain a lot natural fiber and lignans from fruits, vegetables, psyllium, flaxseed, apple pectin and etc. Plenty of omega 3 fats from fish, walnuts, flax and decreased red meat and dairy intake. With some men especially those with increased estrogen would benefit from using soy isoflavones (soy protein).

Chrysin is plant derived compound that has been found to inhibit the aromatase enzyme.

This prevents some men from converting their testosterone into estradiol. It can be applied as a cream and is available in our office.

Tribulus is a medicinal herb that in men increases sperm count, increases LH and testosterone. So it appears that its primary role is to improve brain and testis function. Panax ginseng improves libido, increases testosterone, increases sperm count and general virility. Another herb that helps is called Lepidium meyenii.

Zinc has been found to increase levels of testosterone

which helps to decrease prostate enlargement and tissue changes. We will discuss more about the prostate in our next newsletter.

To help with the liver, using sulfur containing amino acids, magnesium, antioxidants and B-complex are extremely important.

Stress reducing adaptogenic herbs and other compounds are important to minimize the effects of emotional stress. This especially reduces cortisol levels and has an effect on testosterone and male health issues.

