# Men's Health: Restoring Vitality

Beginning at approximately 40 years of age, a man's testosterone levels slowly decline. Approximately 30% of men aged 60-70 years and 70% of men aged 70-80 have low levels of testosterone, a condition often called "andropause" because testosterone is in a class of hormones known as androgens. Androgen deficiency is strongly associated with common medical conditions including metabolic syndrome, obesity, diabetes, hypertension and atherosclerosis; as well as elevations in triglycerides (TGs), total cholesterol (TC), and low-density lipoprotein cholesterol (LDL-C). Androgens may provide a protective effect against the development and/or progression of atherosclerosis in men, and emerging evidence indicates that appropriate therapy can relieve or partially reverse the progression of these problems in testosterone-deficient men.

Hypogonadism is the clinical term for low levels of serum testosterone in association with specific signs and symptoms, including:

· diminished sex drive and sense of vitality
· erectile dysfunction
· depression
· anemia
· heart disease or worsening lipid profile
· reduced muscle mass and bone density
· increased fat mass
· frailty
· osteoporosis

Testosterone levels can be measured by saliva or blood tests. Hormone therapy is recommended for men with symptoms of hypogonadism and low total testosterone levels or high estrogen levels.

Depressed men have been found to have significantly lower bioavailable (free; able to be used by the body) testosterone levels, perhaps because an associated decrease in sexual function results in depression, irritability, and mood swings. Testosterone therapy may improve depressed mood in older men who have low levels of bioavailable testosterone.

Osteoporosis-related fractures occur in 12% of all men over 50 years of age. Twenty-five percent of all hip fractures occur in men, and 33% of these patients die within one year of fracture. Gradual loss of testosterone is one of the major causes of osteoporosis in elderly men. Studies have reported beneficial effects of testosterone therapy in older men, showing an increase in bone mineral density (BMD) and slowing of bone degeneration.

Testosterone replacement therapy (TRT) has relieved symptoms and improved the quality of life for many men. TRT is well tolerated. Laboratory values and clinical response should be monitored frequently so that any necessary adjustments can be made. A recent study found that TRT was associated with beneficial effects on insulin resistance, cardiovascular risk factors (total and LDL-cholesterol, Lipoprotein-a), and symptoms in hypogonadal men with type 2 diabetes and/or metabolic syndrome.

By administering testosterone transdermally (through the skin) in a cream or gel, adequate amounts of testosterone can be absorbed to mimic the normal daily production. Testosterone can also be administered as a sublingual drop or a lozenge that dissolves in the mouth. Compounded preparations can be very advantageous because customized therapies increase compliance.

· the specific dose of hormone(s) needed by each man can be compounded as a dosage form that is most appropriate for the individual.
· there is no need to shave the scrotum to apply a patch and there is no skin irritation from patch adhesive.

A healthy lifestyle is associated with higher hormone levels, and higher hormone levels seem to induce a more active, healthier lifestyle. For optimal results, it is vital that hormone replacement therapy be combined with adequate exercise, proper nutrition, and appropriate use of supplements.

The presence of prostate or breast cancer is an absolute contraindication for androgen replacement therapy. Guidelines recommend that TRT should not be started in older men with PSA serum levels above the normal range. Testosterone should be used with caution in men with severe heart, kidney or liver disease, increased red blood cell counts, and sleep apnea.

***Ask our compounding pharmacist for more information!***
***260.490.3447***