

MANITOBA
MEN'S HEALTH
CLINIC

A GUIDE TO

Understanding Testosterone Replacement Therapy

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Uncovering the truth about low testosterone and TRT.

YOUR COMPREHENSIVE GUIDE

Low testosterone, often referred to as "low T," is a common condition that affects men as they age. In fact, statistics show that approximately 25% of men between the ages of 40 and 62 grapple with low testosterone levels. This condition is medically known as hypogonadism, testosterone deficiency, or andropause. Essentially, it signifies that your body is unable to produce the necessary amount of testosterone due to issues either within the testicles, where testosterone is primarily produced, or with the pituitary gland, which plays a crucial role in controlling testosterone production.

Diagnosing Low Testosterone

Diagnosing low testosterone involves a series of steps to ensure accuracy. Typically, a diagnosis requires testing your blood on two separate occasions to monitor testosterone levels. While this provides valuable information, additional tests may be ordered to identify potential underlying causes. In cases where individuals exhibit symptoms of low testosterone despite having normal testosterone values, physicians may also calculate a value known as "free testosterone" to gain deeper insights into the condition.

Exploring the Causes

Understanding why you might be experiencing low testosterone is a critical step toward effective treatment. Several reversible factors can contribute to low testosterone levels, including but not limited to:

Acute Illnesses: Sudden illnesses can disrupt hormone production, leading to a decline in testosterone levels.

Obesity: Carrying excess weight can have a negative impact on hormonal balance, potentially causing a drop in testosterone.

Medications: Certain medications, such as opioids and glucocorticoids, may interfere with testosterone production.

Nutritional Deficiencies and Anorexia: Inadequate nutrition and eating disorders like anorexia nervosa can disrupt hormonal function.

Extreme Exercise: Intense and prolonged physical activity can temporarily lower testosterone levels.

Sleep Apnea: This sleep disorder can affect hormone regulation, potentially contributing to low testosterone.

Hyperprolactinemia: Elevated levels of prolactin, a hormone produced by the pituitary gland, can suppress testosterone production.

Hypothalamic or Pituitary Disorders: Issues with these critical parts of the brain can disrupt the hormonal signals necessary for testosterone production.

Once these underlying causes are identified and appropriately treated or managed, our clinic can reassess your serum testosterone levels and investigate any lingering signs and symptoms of low testosterone.

The Role of Testosterone Replacement Therapy (TRT)

For those dealing with low testosterone, there is hope in the form of Testosterone Replacement Therapy (TRT). This treatment approach aims to alleviate the negative signs and symptoms associated with low testosterone, ultimately enhancing a patient's quality of life. TRT can be administered through various methods, including:

- Intramuscular (IM) Injections
- Oral Medications
- Transdermal Patches or Gels
- Trans-nasal Gels
- Each of these methods comes with its own set of advantages and disadvantages. The choice of TRT method depends on individual patient needs and is determined through consultation with our physicians.

Fertility Preservation with Low Testosterone

It's crucial to note that TRT can act as a male contraceptive, leading to decreased sperm production. Many patients, and even some physicians, are unaware of this fact. For individuals with low testosterone who wish to preserve their fertility potential, several treatment options are available at our clinic. These options include:

- Human Chorionic Gonadotropin (HCG)
- Selective Estrogen Receptor Modulators (SERMs)
- Aromatase Inhibitors (AIs)
- These methods can effectively boost endogenous (natural) testosterone levels without compromising fertility potential.

Timeline for Improvement

Patients often wonder how soon they can expect improvements in the signs and symptoms of low testosterone after starting TRT. Typically, blood testosterone levels increase before noticeable symptom improvements occur. In general, most patients begin experiencing positive changes within 3-6 months of commencing therapy.

Addressing Concerns: Does TRT Increase the Risk of...

Prostate Cancer: Contrary to historical beliefs, there is currently no evidence linking TRT to an increased risk of prostate cancer. TRT does not significantly raise PSA levels. However, individuals with pre-existing metastatic or high-risk prostate cancer should consult with a urologist to determine the best course of action.

Benign Prostatic Hyperplasia (BPH): TRT does not exacerbate lower urinary tract symptoms or worsen benign prostatic hyperplasia.

Cardiovascular Disease: A significant study called "TRAVERSE" has shed light on the relationship between TRT and cardiovascular health. In men with hypogonadism or low testosterone who also have a high pre-existing risk of cardiovascular disease, TRT does not increase the risk of major adverse cardiac events (MACE). However, for patients who have experienced a recent heart attack, it is still advisable to wait 3-6 months before initiating TRT.

In conclusion, understanding low testosterone and TRT is vital for individuals seeking a solution to this common condition. By debunking myths, addressing concerns, and exploring treatment options, patients can make informed decisions about their health and well-being. Our clinic is here to provide guidance, support, and personalized care to help you navigate the world of low testosterone and TRT.

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