

The Importance of Hormone Replacement Therapy in Men Over 60: Key Side Effects

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ABSTRACT

Hormone replacement therapy (HRT) in men over 60 has gained prominence due to physiological changes associated with aging, such as reduced testosterone levels, commonly known as andropause. This study investigates the importance of HRT for men in this age group, addressing its primary benefits and potential side effects. Results indicate significant improvements in bone density, muscle mass, sexual function and psychological well-being in patients undergoing HRT. However, there are also risks of adverse effects, such as increased hematocrit and the potential exacerbation of pre-existing conditions.

Keywords: Testosterone; HRT; Aging; Andropause

Introduction

Male aging is associated with a gradual decline in testosterone levels, a natural process known as late-onset hypogonadism or andropause. It is estimated that, after the age of 30, testosterone levels decrease by about 1% per year, which can lead to symptoms such as muscle mass loss, fatigue, decreased libido, erectile dysfunction and mood changes. Hormone replacement therapy (HRT) has been widely used to mitigate these symptoms and improve the quality of life for men over 60. Several clinical studies highlight the benefits of HRT, such as increased bone density, reduced body fat and improved cognitive function. However, therapy can also be associated with side effects, including an increased risk of sleep apnea, gynecomastia and cardiovascular risk in predisposed individuals. Given the

growing life expectancy and the rising elderly male population, it is crucial to understand the benefits and risks of this therapeutic approach.

Objective

This study aims to review recent literature on the effects of HRT in men over 60, highlighting its main benefits and side effects. Furthermore, it seeks to provide a critical analysis to assist healthcare professionals in clinical decision-making.

Materials and Methods

A comprehensive bibliographic review of articles published between 2015 and 2025 was conducted in the PubMed, Scopus and Web of Science databases.

Discussion

HRT in men over 60 has proven effective in reducing symptoms associated with late-onset hypogonadism. Recent studies indicate that therapy significantly improves bone density, reducing the risk of osteoporosis and fractures, conditions prevalent in this population. Additionally, increased muscle mass and decreased body fat have been observed, contributing to better physical and metabolic performance. However, HRT is not without risks. Increased hematocrit is a common complication, potentially leading to a higher risk of thromboembolic events. Some studies also suggest the possibility of increased prostatic growth and prostate cancer progression in predisposed patients, although this relationship remains controversial. Moreover, individuals with pre-existing cardiovascular diseases may face a higher risk of adverse events associated with HRT.

Another crucial aspect is the need for continuous monitoring during therapy. Regular evaluation of hormonal levels, hematocrit, liver function and prostate health is essential to minimize risks and adjust dosage as needed. Clinical guidelines also emphasize individualized treatment, considering the patient's health conditions and therapeutic goals. The psychological context is also noteworthy. Men undergoing HRT report significant improvements in mood, reduced depressive symptoms and enhanced quality of life. These aspects highlight the importance of a multidisciplinary approach to managing late-onset hypogonadism. Despite the benefits, the decision to pursue HRT should be based on a comprehensive assessment, including laboratory tests and detailed medical history. Patient involvement in the decision-making process is also critical to ensuring treatment adherence and positive outcomes.

Conclusion

Hormone replacement therapy is a valuable tool in managing symptoms of late-onset hypogonadism in men over 60. Benefits such as improvements in bone density, muscle function and quality of life make HRT an attractive option for many patients. However, potential side effects, including increased hematocrit and cardiovascular risks, require thorough evaluation and continuous monitoring. The success of HRT depends on a personalized approach that considers the patient's health conditions and therapeutic objectives. Additionally, healthcare professionals must stay updated on the latest evidence and adhere to clinical guidelines to ensure the safety and effectiveness of the treatment. Long-term studies are necessary to clarify the implications of HRT and guide safer and more effective clinical practices.

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