

Testosterone for... Osteoporosis?

Editorial

We've heard the word Women (over the age of, say, forty-five) may even give a little anxious shriek when they hear the word "Osteoporosis" Did you know that one out of every five people affected with the disease are men? What's more in the "Little Known Fact" department – across the globe, one out of every three hip fractures occur in men.

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What is Osteoporosis?

Anti-Inflammatories

Osteoporosis, literally meaning "porous bone," is a disease in which a person's bones gradually become brittle and weak. The result is often broken bones or fractures (especially of the spine, hip and wrist) and can be caused by even the simplest of everyday activities – i.e., bending over or lifting a fairly light object. Recent studies by the National Institutes of Health (NIH), suggest that osteoporosis affects about thirty-four million Americans. Another eighteen million – while they may not trigger a bona fide diagnosis, yet - have low bone density and are at an increased risk for the disease. Osteoporosis is more common amongst people in their "golden years," but can strike at any age. Fifty percent of women and twenty-five percent of men over the age of fifty will experience an osteoporosis-related fracture sometime in their lifetime. The presence of early indicators of bone loss/low bone density is called osteopenia.

Osteoporosis in men (versus women)

The most obvious difference between the effects of osteoporosis in women and men is that there are four times as many women than men living with the disease. One physician explains at least some of this difference on the simple, longer life span of women than men.¹ (In other words, with increased age being a strong indicator, more women during later years means more of the things that afflict the elderly). Another likely reason for the lowered risk in men compared to their female counterparts is that men, in general, are concluded to live slightly more active lifestyles than do women in their later years. Since athletic activity has been shown to protect bone density, overall risk is lowered.

One common link between male osteoporosis and female osteoporosis – is its tie to hormonal fluctuations. Women tend to suffer the disease in increased numbers after menopause. Men's osteoporosis is also tightly linked to hormone-related causes.² In fact, a testosterone deficiency takes the biggest blame for causing the disease in men. Physicians who see men with bone loss and low bone density usually evaluate for testosterone deficiency. It's not a simple, causal relationship, unfortunately, and medical researchers are still trying to tease out the complex relationship (i.e., simply increasing testosterone doesn't necessarily lead to increase in bone mass. Researchers also factor in the "testosterone-estrogen conversion." Men, after all, also need a small amount of estrogen to preserve bone density. In fact, as a facet of normal body functioning, men routinely convert testosterone to estrogen to build bone mass.

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Other causes of osteoporosis

Hormones aren't entirely to blame, though. Below are a few, other big contributors to the onset of osteoporosis:

- Other diseases – including cystic fibrosis, diabetes, rheumatoid arthritis, and digestive and blood disorders
- Smoking
- Anti-inflammatory steroids (corticosteroids)
- Drugs for prostate cancer (GnRH agonists)
- Anti-seizure drugs

More about testosterone for osteoporosis

Men who have naturally-low testosterone levels have the option to take testosterone to bring their levels back to normal. This practice is thought to slow bone thinning and reduce calcium loss.³ Testosterone is also believed to improve bone thickness – particularly in spinal bones. A large number of men with low testosterone levels report feeling better (with increased energy) while taking testosterone. As with anything, though, there have been reported side effects.

Can it be treated?

Although osteoporosis cannot be "cured," it can be treated and prevented in a number of ways. Below are a few, simple steps men and their doctors often take to treat the condition

- Small doses of estrogen
- Calcium and Vitamin D
- Exercise (30 minutes of moderate exercise, 5 to 7 days out of the week)
- Testosterone shots

Conclusion

Any man considering increasing testosterone should talk with a trusted physician and perform a sensible "cost to benefit" analysis of testosterone treatments. After all, in the case of most treatment options, the more profound benefits are thought to outweigh most of the minor negatives. A physician or pharmacist should be able to discuss

the possible side effects. In some men, since effects can be serious, a thorough evaluation of options is always a good idea.

Reference

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