



Testosterone Use and Women

Why women need it supplemented

Many of you are now aware that we have a significant number of women on testosterone replacement therapy. Some of you have been asking why and wondering if you need it as well. Some spouses are also asking the same questions. So I will try to answer it as well as I can.

Testosterone use in this practice can be broken down into two distinct categories: improvement in general, overall health and an improvement in libido.¹ The two are noticeably different and many women are on both therapies simultaneously.

The first one to address will be general overall health, especially for the treatment of sarcopenia.² Sarcopenia isn't some horrible disease. It is part of the aging process that causes muscle tissue to waste away while fat tissue replaces it. Testosterone is the best hormone to treat it. Specifically this is for both menopausal women and for women suffering with fibromyalgia/chronic fatigue syndrome.

When women are young and having a normal menstrual cycle, most do not realize that their ovaries are actually producing *more* testosterone than estrogen. The body uses this testosterone for various purposes (see the previous article on health benefits), yet when women go through menopause and their bodies shut down the production of estrogen/ testosterone/ progesterone in the ovaries, physicians only want to replace the estrogen and progesterone (if at all). Some will use an oral form of testosterone combined with estrogen, i.e., Estratest[®], but as noted in the previous article, oral testosterone is not healthy for you and can hurt your liver.

Fibromyalgia patients, on the other hand, are mostly still menstruating and yet they benefit from having testosterone supplementation. Why is that? For some, their serum levels of total testosterone are on the lower end of "normal" and they need to have it boosted to a much higher level. Sometimes, they benefit from the testosterone being into the "above normal" range of up to 180-200 ng/dL (the "normal range" is 20-70 ng/dL). They tolerate this level well and do not suffer with male pattern hair growth. Symptoms of fibromyalgia diminish with the use of

testosterone for the most part but they will never disappear entirely.

Testosterone taken for both post menopausal women and fibromyalgia patients should be given systemically. This means that it should be introduced into the body so that it circulates throughout the entire body and not stay in one location only (this will be clearer after reading about libido). Transdermal testosterone is possible as noted in the previous article but it must always be compounded to reduce the actual dose to a more tolerable level. Cost can be about \$50/month or more. Another option is to have the pellet implant. The insurance will cover the cost of the procedure and you will only need to pay for the pellets at about \$15-\$30 per treatment (depending on the number of pellets implanted).

For the improvement of libido, testosterone is taken in a different fashion. Rather than giving you a systemic dose of testosterone that is diluted throughout your entire body with a small amount being delivered to your clitoris, a stronger topical gel is applied to your clitoris directly each morning. The clitoris is loaded with testosterone receptors and responds to the increased testosterone by enlarging mildly in size and increasing sensitivity and enhancing sensuality and orgasms. The cost is about \$50 for 30 grams of gel that will last many months and so it is very cheap to use when compared with Viagra for women. In my experience here in this practice, you will either respond quite dramatically or not at all. If you do not respond within one month of starting the gel, do not bother to refill it. There are multiple facets of your libido and if the testosterone supplementation did not enhance it, then hormones is not the reason why your libido is low.

So in conclusion, women benefit physically, mentally, and sexually from testosterone replacement therapy. By choosing the method of delivery, you are also able to select the response that you want. For example, if libido is not a problem, then the systemic testosterone would be the only thing needed. If you are still menstruating but have a low libido, then a trial of clitoral gel is recommended.

If you should have any questions about testosterone replacement in women, please just ask Dr. Work.

¹ Davis, S. Androgen Replacement in Women: A Commentary. *J Clin Endocrinol Metab* 84: 1886-1891, 1999.

² Morley, J Testosterone Replacement in Older Men and Women. *J Genet Specif Med* 2001;4[2]:49-53.