My Low T

Bradley Changstrom, MD, PGY3

Story from the Front Lines:

My testosterone is everywhere.

My testosterone is on billboards, on the radio (I’ve heard about it on NPR and ESPN) and even in my fantasy football league.\(^1\) Everyone and everything is telling me that I should get my T levels checked! Not only that, but if my T level is low, I can raise it with shots, implants, and patches. Axiron even sells it in deodorant form! There are at home kits to check my T level\(^2\) and even the “Low T Center” that can meet all of my T needs. How easy is that? Why would I say no when my patients ask me to check their T levels since testing and treatment are so easily available?

It turns out; I don’t say no very often when patients ask to have their T levels checked. A quick review of my clinic patient panel shows that I’ve checked 3 testosterone levels in the last 2 years. Three different patients came to my clinic within a few months of each other asking about treatment for erectile dysfunction and it seemed appropriate to evaluate why they were having difficulty with erections. Why treat erectile dysfunction with a phosphodiesterase inhibitor (PDE-I) if the real problem is low testosterone? Each time I wrote the prescription for a PDE-I and checked a T level. In two of the cases, the levels came back low. I had seen several men treated for low testosterone previously so I felt comfortable with prescribing testosterone therapy, but I was uneasy about the prospect of prescribing it in both of these cases. For many men, we correlate testosterone with quality of life and this appeared to be a quality of life issue. However, all three patients had serious cardiovascular comorbidities and were poor candidates for testosterone therapy. Recurrent stroke or heart attack are clearly quality of life issues as well.

Teachable Moment:

It seems that heavy advertising has led men to correlate fatigue, low energy and low libido with low testosterone levels and these men are asking clinicians for help. But I shouldn’t place the blame on patients. Although, pharmaceutical companies spent more than $3 billions dollars in direct to consumer advertising in 2012, they spent nearly 8 times as much—approximately $24 billion—marketing to physicians. Although, it seems that a blood level can at least help provide some reassurance to patients about why they feel poor, it also seems that there is heavy

\(^1\) Highest T level measured by an at home saliva measurement gets the first pick in the fantasy draft next year.

\(^2\) 34.95 plus shipping and handling at Amazon.com
incentive for producers of testosterone to convince prescribers to check testosterone levels and prescribe therapy. Testosterone is prescribed for an estimated 2.9% of US men aged 40 years and older and the makers of AndroGel alone generated about $1.2 billion in sales in 2012 (Cappola, 2013).

What about the risks of testosterone supplementation? One of the recent major studies on risk of testoerone supplementation came from my training institution (Vigen et al., 2013), which showed a HR 1.29 and absolute risk difference of 5.8% for cardiovascular events. Other recent studies have demonstrated some of the same risks. One of the most interesting studies was a meta-analysis of placebo-controlled trials of testosterone therapy. What was shocking was that unfunded studies suggested an OR 2.06 (1.34-3.17) for cardiovascular related events with testosterone use whereas studies that were funded by pharmaceutical companies showed an OR of 0.89 (CI 0.50-1.60) (Xu et al., 2013). Finally, a recent study showed that men over the age of 65 had a two-fold increase in the risk of heart attack within 90 days of filling an initial prescription (Finkle et al., 2014).

Overall, I’m relieved that I haven’t written that prescription for testosterone yet, but I recognize that I will need to take a closer look at my patients and determine if they will be candidates for treatment prior to ordering the blood test. I’m sure I’m not alone in this practice. But it’s another reminder that it is easy in medicine to order diagnostic tests and provide answers to patients. What is difficult is not only knowing when to ignore that impulse to order an unnecessary test but also recognize that many outside influences, including advertising, may be affecting some of those decisions.

References:
Vigen et al. Association of Testosterone Therapy with Mortality, Myocardial Infarction and Stroke in Men With Low Testosterone Levels. JAMA 2013. 310 (17); 1829-1836.

Cappola. Testosterone Therapy and Risk of Cardiovascular Disease in Men. JAMA 2013. 310 (17); 1805-1806.

