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INVITED COMMENTARY

Commentary on “Late-onset hypogonadism - beyond testosterone”

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The paper from Foresta et al.1 presents data from two cohorts of men (mean age 35) attending for infertility assessment. A distinction is made between the classical hypogonadism (total testosterone [TT] 12 nmol l\(^{-1}\) or less) and “subclinical” hypogonadism with a normal TT but marginally raised luteinizing hormone (LH). They also stress that too much emphasis should not be placed on the need for the presence of sexual symptoms and stress the importance of obesity, insulin resistance, and type 2 diabetes. They rightly point out the relationship between low testosterone (T), low-vitamin D, and increased mortality along with increased risk of type 2 diabetes.2–4 These are vitally important issues that should concern us all and yet we must ask ourselves why these accepted views in the fields of andrology and sexual medicine are not widely held by our colleagues in diabetes and endocrinology.

Many of us regularly attend endocrine conferences and frequently note that T will not even be considered in discussions on insulin resistance and type 2 diabetes. The numerous long-term studies showing loss of visceral fat, and increased lean muscle mass but will not even be considered as relevant to the treatment for obesity,5,6 even though conventional management strategies continue to produce disappointing long-term outcomes. Even the concept of “classical” hypogonadism at TT of 12 nmol l\(^{-1}\) is often replaced by the suggestion that a “cautious” approach is required and that T replacement therapy (TRT) should be reserved for those with “overt” hypogonadism, with levels as low as 6 nmol l\(^{-1}\) being suggested for treatment.7 Many laboratories quote levels as low as 4.9 nmol l\(^{-1}\) for the normal range. Frequent reviews warn of potential “androgen Armageddon” quoting poorly designed studies reported as showing increased cardiovascular events and warning of scenarios similar to hormone replacement therapy in women recently.8–11 Against this background of extreme caution, it will be very challenging to convince skeptics that there are a group of men with “normal” T levels, but LH levels in the upper normal range who merit treatment. Most current guidelines do not support the measurement of LH unless there is definite evidence of low T, meaning that most of these men currently go undiagnosed.

The current study from Foresta et al.1 involves younger men in their thirties referred with infertility but with no information as to whether these men suffered from sexual dysfunction or merely reduced fertility. The beneficial effect of the 25-hydroxylated form of vitamin D, but not the precursor, is an important message as many health systems are skeptical that there are a group of men with “normal” T levels, but LH levels in the upper normal range who merit treatment. Most current guidelines do not support the measurement of LH unless there is definite evidence of low T, meaning that most of these men currently go undiagnosed.

REFERENCES


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