Use of testosterone for 'male menopause' questionable says DTB

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The use of synthetic testosterone to combat symptoms of the so-called "male menopause" is questionable, given that it's not clear whether such a syndrome exists, and that the evidence of the hormone's effectiveness in these circumstances is inconclusive, says the *Drug and Therapeutics Bulletin* (*DTB*).

Unlike the menopause in women, where levels of the female hormone oestrogen plummet and production stops almost completely, in general, testosterone levels fall by only around 1 to 2% a year from the age of 40 onwards in men and production of the hormone does not stop, says *DTB*.

Low levels of testosterone are not an inevitable consequence of ageing, it says: around 80% of 60 year olds and half of those in their 80s still have levels within the normal range for younger men.

Low testosterone levels in older men do not necessarily produce symptoms. And symptoms sometimes attributed to low hormone levels, such as low sex drive, erection problems, diminished strength, and low mood, occur in many men with normal testosterone levels.

Overall, the evidence that an age-related reduction in testosterone levels causes specific symptoms is weak, says *DTB*.

These facts undermine the idea that some men develop a condition called late-onset hypogonadism, sometimes known as the "male menopause" or "andropause," it says.

The published evidence is also inconclusive on whether testosterone given to ageing men with low levels of the hormone improves symptoms, such as poor sexual function or depression.

And while there is some suggestion that it modestly increases bone density and muscle strength, whether such effects translate into worthwhile benefits, such as reduced risk of bone fractures, has not been proved.

Testosterone treatment also has several unwanted side effects, says *DTB*. These include a rise in prostate specific antigen (PSA), blockage of the urinary tract, development of prostate cancer and the development of breasts (gynaecomastia). And it can aggravate ischaemic heart disease, epilepsy, and sleep apnoea.

There are potential issues associated with the different ways of administering testosterone. For example, patches can irritate the skin; implants require minor surgery, which carries risks; and gels can be inadvertently transferred to other people.

Overall, *DTB* sees only very limited scope for treating men with testosterone who have low levels of the hormone related to age.

"Clinicians should not offer testosterone therapy without explicit discussion of the uncertainty about its risks and benefits in this population," it says.

And it concludes: "There is no place for testosterone therapy in older men without symptoms, or without clearly low testosterone concentrations on more than one occasion."

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