

Unmanned by the curse of Low Testosterone

Drugs to replace testosterone are widely prescribed. Are they a miracle cure, or part of an 'anti-ageing racket' for men.

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Paul Pennington considered himself a typical mid-life male. At 48 he had slowly gained weight and lost fitness. As his athleticism fell, so had his libido and self-esteem. He was exhausted, relationships were floundering and he felt his life was careering to a dead end.

"I was like a bear with a sore head," he says. "I couldn't shift my belly fat.

I was borderline diabetic. There was not a drop of sex-drive left in me and I would wake up sweating, something I put down to stress. I just lost the will to do anything."

It was only when making a film about testosterone deficiency that Pennington, a journalist, says "the penny dropped", and that his symptoms might point to a drop in his levels of the male hormone, or Low T. "I had a blood test and discovered I had the testosterone levels of an 86-year-old man," he says. "I was prescribed a hormone gel ... and it changed my life."

Two years later and five stones lighter, Pennington looks back on his forties as "mostly a living hell". He is now fit, running up to 24 miles a week even though he "was never a runner before", and is brimful of energy. This new normality, he says, is maintained by T-jabs he receives from a doctor. He has made it his mission to make more men aware of the help available.

The Andropause Society, a charity seeking greater understanding of male hormone deficiency, says that in the past five months 9,000 men have contacted it for advice, double the number in previous years. Dr Malcolm Carruthers, the founder of the Centre for Men's Health, a Harley Street clinic that offers testosterone replacement therapy (TRT), says his clients are no longer just the middle-aged and older but are often in their twenties and thirties. Robbie Williams, 39, admitted injecting the hormone twice a week after a doctor told him he had the "testosterone of a 100-year-old".

Beyond its ability to treat medical symptoms, testosterone has become the therapy of choice for men looking to defy the downhill slide of maleness, previously taken for granted. It promises to leave them feeling (and looking) 20 years younger, recharging their zest for life. Men, it seems, can't get enough of the "he" hormone. As demand rises, so a multibillion pound industry is being spawned. Although NHS prescriptions are available for extreme cases, it is private prescriptions fuelling the boom. Last year global sales of testosterone replacement products reached almost £1.3 billion and the pharmaceutical industry is putting huge amounts into developing injectibles, gels and patches. In America, the advertising tracker Kantar Media estimates that spending on ads for T-products has nearly tripled in three years.

One pharmaceutical company, Abbot Laboratories, has a web questionnaire for men that asks questions such as "Are you sad and/or grumpy?" and "Are you falling asleep after dinner?". If you answer yes, it suggests you could have Low T. The condition can be treated with its product Androgel, available in the UK as Testogel. There are also Androderm patches, applied daily, and Axiron, an underarm gel, which is likely to be available in the UK soon.

Although often considered the definition of maleness, testosterone is produced by both sexes. Women make it in their ovaries and adrenal glands, men in much higher amounts in their testes. The hormone influences muscle mass, sperm production and sexual characteristics. Typical levels for men range from

250 to 1,100 nanograms (ng) per decilitre (dL) of blood but as men age, the amount of the hormone gradually drops. After 30, a decline of about 1 per cent a year begins.

Studies have suggested that as many as one in five men over 50 has Low T, although some experts claim it is higher. Levels can be checked with a blood test but doctors cannot agree on what is a low reading; some advocate therapy at below 80ng per dL, others not at all.

Carruthers has spent 30 years trying to convince his peers that testosterone deficiency is worthy of treatment. “Progress has been perilously slow, but evidence is piling up in a number of areas,” he says. “It is increasingly becoming part of mainstream medicine as studies prove that it can be beneficial in terms of helping to prevent heart disease, osteoporosis and diabetes in men.”

Carruthers is involved in a study with the McCusker Alzheimer’s Research Foundation in Perth, Australia, which is looking at how testosterone might improve mental functioning in early cases of Alzheimer’s.

There is also the possibility, clichéd as it may seem, that TRT can transform you into something of an Adonis.

A study in *The New England Journal of Medicine* showed that subjects given T-injections for ten weeks displayed larger triceps and quadriceps.

At the University of Adelaide, Professor Gary Wittert, head of the school of medicine, is studying the effects of TRT on type 2 diabetes, a condition that affects 330 million people worldwide. He says there are several ways that testosterone replacement may help but “we don’t yet know exactly the full effects”.

Others have shown that the benefits of testosterone are not just physical and that it correlates with energy, self-confidence, tenacity and mental strength. Last year, a German study of 115 men found that their waistlines shrank by an average of 9cm with T-jabs over five years. It didn’t surprise researchers that it reduced body mass index, cholesterol and blood-sugar levels. Less expected was that subjects had greater motivation to exercise.

“There are many psychological implications,” Carruthers says.

“A deficiency can cause mental confusion, depression and lack of drive. As a result, men can lose their incentive to do things such as keeping fit.” If Wittert’s study shows that TRT works, “the treatment may be a useful adjunct to lifestyle management — assuming it is confirmed to be safe”.

It is safety that has many doctors stalling at the concept of TRT. There have been anecdotal links to prostate cancer, although Carruthers says his own study — in which he tracked almost 1,500 men for 15 years— did not find proof of a connection. He says: “The biggest possible downside is that testosterone stimulates the production of red blood cells which (can) increase the risk of clotting and a heart attack.”

It underlines the need for TRT to be conducted under medical supervision, he says, adding “it is generally one of the safest treatments around”.

Other critics claim that low testosterone is the latest example of natural ageing being medicalised, and that the rise in prescriptions is simply a way to get men to part with their cash. Experts such as David Handelsman, professor of medicine at the University of Sydney, have dubbed it “an anti-ageing racket”. Last year, a group of doctors headed by Simon Pearce, a professor of endocrinology at Royal Victoria Infirmary, in Newcastle upon Tyne, complained to the *British Medical Journal* that far too many men were receiving unnecessary TRT.

“Many of the symptoms men assume to be a result of low testosterone are the result of other problems, such as stress, thyroid problems, alcohol intake and overwork,” says Dr Sean Cummings, medical director of Freedomhealth in Harley Street.

“People like a label, they like a neat remedy,” he says. “I would say that drug manufacturers have created a presence for this new ‘disorder’. But actually, when we measure testosterone levels in some men, they are invariably not low.”

For Paul Pennington, though, the discovery that he had Low T has been life-changing. “I had changed as a person. For 13 years prior to getting testosterone treatment I struggled with my health. All I know is that now there is no looking back.”

Seven signs you might have Low T

1. Shaving less

Testosterone production increases hair growth on the body and face. Lower levels cause males to lose this hair; very often the first sign of Low T is that men find they need to shave less frequently.

2. Decreased muscle mass

Although some men with Low T experience visible loss of muscle, for many the reduction is more subtle. Common complaints include “not feeling as strong” as they did and failing to become more muscular despite going to the gym.

3. Moobs

Less testosterone often means higher levels of body fat and the development of man-boobs (or moobs), as well as a thicker waistline.

4. Numbness

According to Dr Abraham Morgentaler, author of *Testosterone for Life*, Low T can cause slight numbness in the genital area and a failure to respond to touch.

5. Reduced volume

Since testosterone is required to produce a normal ejaculatory volume of 1.5-5millilitres, men with Low T often report that volume seems lower than normal.

6. Night sweats

Low T is the most common cause of night sweats in men. A lack of testosterone means false signals are sent to the hypothalamus in the brain, prompting a night sweat. High levels of stress and a lack of fitness can exacerbate the problem.

7. Shrinkage

Both penis and testicles can shrink because surplus testosterone is not available to maintain their size and function. Testicles often feel softer and smaller in size.