

Testosterone deficiency

Overview

Feeling tired, experiencing mood swings, low libido, irritability, hot flushes, difficulty concentrating, fatigued and generally not yourself?

Sound like menopause? Except, you are a man. It could be testosterone deficiency, also known as androgen deficiency.

The process of declining testosterone levels is very different to the process of menopause for women, so medical professionals generally avoid the term male menopause.

Falling testosterone levels

In men, the male sex hormone testosterone falls very gradually over a much longer period of time. In fact research has shown that the rate of testosterone decline can be as much as 1% per year from the age of 40 onwards.

Sometimes testosterone deficiency can be related to conditions such as obesity, or chronic illness such as depression.

Some men will remain unaffected by naturally declining testosterone levels but those who experience a large decline in testosterone levels may require testosterone therapy.

Causes

Testosterone deficiency generally results from a problem with:

- ▶ The testes (primary hypogonadism).
- ▶ The pituitary gland which sends signals to the testes telling them how much testosterone to produce.
- ▶ A chronic illnesses that can affect testosterone production (secondary hypogonadism).

In the case of primary hypogonadism, causes can include:

- ▶ Klinefelter's syndrome. This is a where there is an abnormal number of sex chromosomes (usually a single extra X chromosome). This syndrome affects an estimated 1 in 650 men, but many are undiagnosed.
- ▶ Undescended teste/s. This happens when one or both testicles fail to move into the scrotum of an infant before birth. The condition is usually corrected with surgery.
- ▶ Radiation therapy for Testicular cancer.
- ▶ Chemotherapy.
- ▶ Inflammation of one or both testes.
- ▶ Trauma to one or both testes.
- ▶ Drug and alcohol abuse.
- ▶ Endocrine gland abnormalities.

Causes of secondary hypogonadism can include:

- ▶ Chronic disease such as HIV, chronic

obstructive pulmonary disease, obstructive Sleep apnoea, kidney (renal) failure and diabetes.

- ▶ Ageing.
- ▶ Abnormally high levels of the hormone prolactin, also known as hyperprolactinaemia.
- ▶ Some medications, including opiates, anabolic steroids and glucocorticoids.
- ▶ Hypothalamic/pituitary tumours.
- ▶ Head injury.
- ▶ Disorders such as haemochromatosis, sarcoidosis and histiocytosis.
- ▶ Obesity.
- ▶ Excessive exercise.
- ▶ Eating disorders.
- ▶ Infections such as tuberculosis.

Symptoms

Common testosterone deficiency symptoms can include:

- ▶ Decreased desire for sex (libido).
- ▶ Reduced sexual activity.
- ▶ Decreased spontaneous erections (nocturnal or waking morning erections), which normally occur without sexual stimulation.
- ▶ Breast discomfort.
- ▶ Enlarged breast tissue, also known as gynaecomastia.
- ▶ Reduced bone density.
- ▶ Loss of body hair, including facial and pubic hair. One of the first signs may be a reduced need to shave.
- ▶ Decreased muscle bulk and strength.
- ▶ Hot flushes and sweats.
- ▶ Infertility.

Diagnosis

To diagnose testosterone deficiency, your doctor will generally ask about your medical history and any symptoms, and conduct a physical examination, which includes a measurement of the testes.

Blood tests will also be used to measure testosterone levels and these will usually need to be done over a period of days repeated to establish an average reading.

Because testosterone deficiency can be a sign of another underlying condition, other diagnostic tests may be required.

Treatment options

Testosterone replacement therapy is the mainline treatment for testosterone deficiency, and research has shown it improves:

- ▶ Sexual function (including libido and erectile function).
- ▶ Bone density.
- ▶ Energy levels.
- ▶ Mood.
- ▶ Memory.

Some men, including cancer patients should not have this kind of therapy. Your doctor will be able to tell you if you are a suitable candidate.

Testosterone replacement therapy can be delivered in a number of ways, including:

- ▶ Tablets and capsules taken orally.
- ▶ Injection.
- ▶ Implants.
- ▶ Patches.

Creams and gels applied to the skin, which release testosterone into the body.

As with any treatment, there are potential side effects. Research shows that testosterone therapy is generally well tolerated, but side effects can include:

- ▶ Acne and oily skin.
- ▶ Breast tenderness.
- ▶ Hair loss.
- ▶ Mood changes.

The risk of adverse effects increases in men who are older, smokers and those with chronic obstructive pulmonary disease.

Men on testosterone replacement therapy should have regular check-ups with their doctor for tests to check the prostate, blood count, cholesterol level and bone density.

Lifestyle and diet

It is impossible to prevent something that is part of a man's life cycle. Testosterone levels will decrease with age, but maintaining a healthy lifestyle may help lower the risk of suffering serious symptoms of testosterone deficiency.

Sleep is a key to this lifestyle, and it is recommended that men get at least 7 hours of sleep, as it is important for hormone production.

Other factors include:

- ▶ Minimise alcohol consumption.
- ▶ Avoid smoking.
- ▶ Exercise regularly.
- ▶ Manage stress levels.
- ▶ Eat well with plenty of fresh fruit and vegetables and omega-3 fatty acids - the oils found in fish like salmon and mackerel.

Testosterone deficiency

Support and resources

Support and online resources for testosterone deficiency.

- Impotence Australia
www.impotenceaustralia.com.au
- Andrology Australia
www.andrologyaustralia.org
- Mensline Australia
www.mensline.org.au

Sources

- MD Consult
- Australian Doctor

ItsMyHealth.com.au