Androgenemia Nervosa

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Abstract

This brief communication describes androgenemia nervosa, an excessive preoccupation with serum testosterone levels. Commonly noted in young and middle-aged men with non-specific symptoms, it may be associated with metabolic disorders such as obesity, stress, substance abuse and other psychiatric disorders. Counselling and support are first-line therapy for this condition. Psychotropic pharmacotherapy is rarely needed. Enhanced public awareness and preventive measures are required to mitigate the effects of androgenemia nervosa.

Keywords: Biopsychosocial, hypogonadism, late onset hypogonadism, image disorder, obesity

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Introduction

The suffix 'nervosa' is frequently used in medication to describe diseases that impact an individual's biomedical, psychological or social health. Anorexia nervosa and bulimia nervosa, both forms of endocrine eating disorders, are established terms. Newer entries into the medical lexicon include orthorexia nervosa, glucometric nervosa and barometric nervosa. Orthosomnia describes a sleep-related condition that can more aptly be named as orthosomnia nervosa.[1-4]

Preoccupation with androgen levels

To this list, we propose a new entrant. Androgenemia nervosa is a condition that we increasingly encounter in endocrine clinics. Occurring in young and middle-aged men, androgenemia nervosa is defined as an excessive preoccupation with serum testosterone levels. Afflicted individuals present with the primary complaint of a low testosterone level, rather than symptoms suggestive of hypogonadism. They may have utilized direct access testing (DAT), may have undergone the tests as a part of routine health care, or may have been prescribed the investigation for non-specific symptoms.

Reports in the lower normal range of testosterone trigger anxiety and nervousness, which worsens preexisting somatic, psychological and sexual dysfunction.[5] This sets into motion a vicious cycle of worsening biopsychosocial health, and leads to androgenemia nervosa.

Pathogenesis and presentation

The condition is common in obese men with high levels of stress, poor physical activity/exercise habits, and low self-esteem. It also occurs in persons who abuse anabolic androgenic steroids and/or high protein supplements.

Androgenemia nervosa may occur in isolation, or as part of generalized anxiety disorder, major depressive disorder, or other mental health diseases. Preoccupation with testosterone levels may be noticed in schizophrenia.

Apart from repeated testing, and enquiry about the significance of their results, men with androgenemia nervosa may begin to abuse testosterone supplementation therapy.[6] While this may seem useful in the short term, it detracts from the need to optimize lifestyle weight and metabolic health.

Analysis and addressal

Management of the disease is based in empathic support and engagement, as well as evidence-based counselling. A detailed history taking will reveal the reason for the first test. This allows one to address the root cause, which may be erectile dysfunction, sarcopenia or a feeling of early ageing. Further conversation will unearth the counselling that the patient received. This creates an opportunity to dispel myths and misunderstandings, while sharing the right information, with respect and reassurance.

It is noteworthy that the evaluation of late onset hypogonadism calls for anamnesis (history taking) and examination, followed by investigations, and not the other way round.[5] This, along with the need for accurate measurement, in conjunction with other hormonal and metabolic parameters, must be explained in an esemplastic manner.

The conditions of functional hypogonadism, obesity associated reprosexual syndrome (OARS) and anabolic androgen abuse syndrome (AAAS), which are the

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commonest causes, contributors and confounders of androgenemia nervosa, must be evaluated and addressed if necessary.[6,7]

Meaningful management

Such therapeutic patient education (TPE) usually suffices. However, support to correct dysfunctional lifestyle, diet, stress, sleep and substance abuse patterns is equally necessary. Pharmacotherapy may be needed for metabolic comorbidities such as obesity. At the same time, a review of concomitant medication may reveal drugs like spironolactone, statins, beta blockers and ranitidine that suppress androgens or cause fatigue.

A few patients may require short term therapy to manage distressful symptoms of anxiety or depression.

Moving ahead

As DAT becomes more and more affordable, and as modern lifestyle diseases such as obesity exploded we expect that androgenemia nervosa will increase in incidence. A concerted multidisciplinary, multimodal preventive approach, lead by endocrinologists and sports medicine specialists, with community physicians, is required to manage this.

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