Gynecological Endocrinology ›
Volume 33, 2017 - Issue 2

Sexual Dysfunction in Premenopausal Women

Sexual dysfunction in premenopausal women could be related to hormonal profile

Fabiene Bernardes Castro Vale, Bruna Barbosa Coimbra, Gerson Pereira Lopes & Selmo Geber

Pages 145-147 | Received 18 May 2016, Accepted 17 Aug 2016, Published online: 12 Jan 2017

Download citation https://doi.org/10.1080/09513590.2016.1226793 Check for updates

Full Article Figures & data References Citations Metrics

Reprints & Permissions Get access

Abstract

Female sexual dysfunction (FSD) is a public health problem that affects women's quality of life. Although the relationship between some hormones and the FSD has been described, it is not well established for all hormones. Therefore, the aim of our study was to evaluate the association between hormonal dysfunction and sexual dysfunction in premenopausal women. We performed a cross-sectional study with 60 patients with regular menstrual cycles, with age ranging from 18 to 44 years, with previous diagnosis of FSD. All patients were evaluated using the female sexual function index (FSFI) questionnaire and had the levels of total testosterone, prolactin (PRL), thyroid-releasing hormone and free testosterone index measured. Among the 60 patients, 43 (71.7%) were diagnosed with hypoactive sexual desire disorder (HSDD), 9 (15%) had anorgasmy and 8 (3.3%) had sexual pain dysfunction. Hormonal evaluation, demonstrated that 79.1% of patients with HSDD, 78.4% of patients with anorgasmy and 50% of patients with sexual pain dysfunction had female androgen insensitivity. We can conclude that there is an important association between low levels of total and free testosterone and FSD. This finding offers a new alternative for diagnosis and treatment of HSDD. Moreover, given the potential role of androgens in sexual function,

randomized controlled trials with adequate long-term follow-up are essential to confirm its possible effect.

Chinese abstract

女性性功能障碍 (FSD) 是一个影响女性生活质量的公共卫生问题。尽管已有研究讨论过一些激素和FSD之间的关系, 但其并非对所有激素均适用。因此, 我们研究的目的是评估激素水平失调与围绝经期女性的性功能障碍之间的关系。我们对60例月经周期规律的已诊断为FSD的患者进行了横断面研究, 患者年龄跨度从18到44岁。所有患者均使用女性性功能指数 (FSFI) 问卷进行评估, 并测量体内的总睾酮、催乳素 (PRL) 、甲状腺激素和游离睾酮水平。在60例患者中, 43例 (71.7%) 患者被诊断为性欲减退功能障碍 (HSDD) , 9例 (15%) 患者性快感缺乏, 8例 (3.3%) 患者有性疼痛功能障碍。激素水平测量显示79.1%的HSDD患者、78.4%的性快感缺乏患者及50%的性疼痛功能障碍患者对雄激素不敏感。我们可以得出结论, 低水平的总睾酮和游离睾酮与FSD之间有重要联系。这一发现为HSDD的诊断和治疗提供了新的替代方案。因此, 充足的随机对照试验长期随访对于确认雄激素在性功能中的潜在作用是很有必要的。

Keywords: Female prolactin sexual dysfunction testosterone

Declaration of interest

The authors report no conflicts of interest.

R. Rosen, C. Brown, J. Heiman, S. Leiblum, C. Meston, R. Shabsigh, D. Ferguson, R. D'Agostino

Journal of Sex & Marital Therapy

Published online: 2 Feb 2011

Sexual Response Cycle

The sexual response cycle is one model of physical and emotional changes that happens when you are participating in sexual activity. There are four phases in this cycle. Orgasm is the shortest phase.

What is the sexual response cycle?

The sexual response cycle refers to the sequence of physical and emotional changes that occur as a person becomes sexually aroused and participates in sexually stimulating activities, including intercourse and masturbation. Knowing how your body responds during each phase of the cycle can enhance your relationship and help you pinpoint the cause of sexual dysfunction. There are several different proposed models of a sexual response cycle. The one that is reviewed here is one of the more commonly quoted.

What are the phases of the sexual response cycle?

The sexual response cycle has been described as having four phases:

1. Desire (libido).
2. Arousal (excitement).
3. Orgasm.
4. Resolution.

Both men and women can experience these phases, although the timing may be different. For example, it's highly unlikely that both partners will reach orgasm at the same time. In addition, the intensity of the response and the time spent in each phase varies from person to person. Many women won't go through the sexual phases in this order.

Some of these stages may be absent during some sexual encounters, or out of sequence in others. A desire for intimacy may be a motivation for sexual activity in some individuals. Understanding these differences may help partners better understand one another's bodies and responses, and enhance the sexual experience.

Several physiologic changes may occur during different stages of sexual activity. Individuals may experience some, all or none of these changes.

Phase 1: Desire

General characteristics of this phase, which can last from a few minutes to several hours, and may include any of the following:

- Muscle tension increases.
- Heart rate quickens and breathing gets faster.
- Skin may become flushed (blotches of redness may appear on the chest and back).
- Nipples become hardened or erect.
- Blood flow to the genitals increases, resulting in swelling of the woman's clitoris and labia minora (inner lips), and erection of the man's penis.
- Vaginal lubrication may begin.
- The woman's breasts become fuller and the vaginal walls begin to swell.
- The man's testicles swell, his scrotum tightens, and he begins secreting a lubricating liquid.

It's important to note that everyone sexual experience is different. Some may not consistently experienced the above changes. Not only can this vary between individual persons, but can also vary in an individual between different sexual encounters. Sometimes the desire phase may come after

Phase 2: Arousal

General characteristics of this phase, which extends to the brink of orgasm, include the following:

- The changes begun in the first phase get more intense.
- The vagina continues to swell from increased blood flow, and the vaginal walls turn a darker color.
- The woman's clitoris becomes highly sensitive (may even be painful to touch).
- The man's testicles are withdrawn up into the scrotum.
- Breathing, heart rate and blood pressure continue to increase.
- Muscle spasms may begin in the feet, face and hands.
- Tension in the muscles increases.

Phase 3: Orgasm

This phase is the climax of the sexual response cycle. It's the shortest of the phases and generally lasts only a few seconds. General characteristics of this phase include the following:

- Involuntary muscle contractions begin.
- Blood pressure, heart rate and breathing are at their highest rates, with a rapid intake of oxygen.
- Muscles in the feet spasm.
- There is a sudden, forceful release of sexual tension.
- In women, the muscles of the vagina contract. The uterus may also undergo rhythmic contractions.
- In men, rhythmic contractions of the muscles at the base of the penis result in the ejaculation of semen.
- A rash or "sex flush" may appear over the entire body.

Phase 4: Resolution

During this phase, the body slowly returns to its normal level of functioning, and swelled and erect body parts return to their previous size and color. This phase is marked in some by a general sense of well-being and, often, fatigue. Some women are capable of a rapid return to the orgasm phase with further sexual stimulation and may experience multiple orgasms. Men typically need recovery time after orgasm, called a refractory period, during which they cannot reach orgasm again. The duration of the refractory period varies among individuals and changes with age.

Last reviewed by a Cleveland Clinic medical professional on 03/08/2021.

References

Related Institutes & Services

Glickman Urological & Kidney Institute

The Glickman Urological & Kidney Institute offers innovative treatments in urology and nephrology, including minimally invasive, scarless options for urologic procedures and medical management of kidney disease.

Ob/Gyn & Women's Health Institute

Cleveland Clinic's Ob/Gyn & Women's Health Institute is committed to providing world-class care for women of all ages. We offer women's health services, obstetrics and gynecology throughout Northeast Ohio and beyond. Whether patients are referred to us or already have a Cleveland Clinic ob/gyn, we work closely with them to offer treatment recommendations and follow-up care to help you receive the best outcome.

More health news + info

SHOW MORE

APPOINTMENTS & ACCESS

CONTACT US

Actions

Appointments & Access
Accepted Insurance
Events Calendar
Financial Assistance
Give to Cleveland Clinic
Pay Your Bill Online
Refer a Patient
Phone Directory
Virtual Second Opinions
Virtual Visits

Blog, News & Apps

Consult QD
Health Essentials
Newsroom
MyClevelandClinic
MyChart

About Cleveland Clinic

100 Years of Cleveland Clinic
About Us
Locations
Quality & Patient Safety
Office of Diversity & Inclusion
Patient Experience

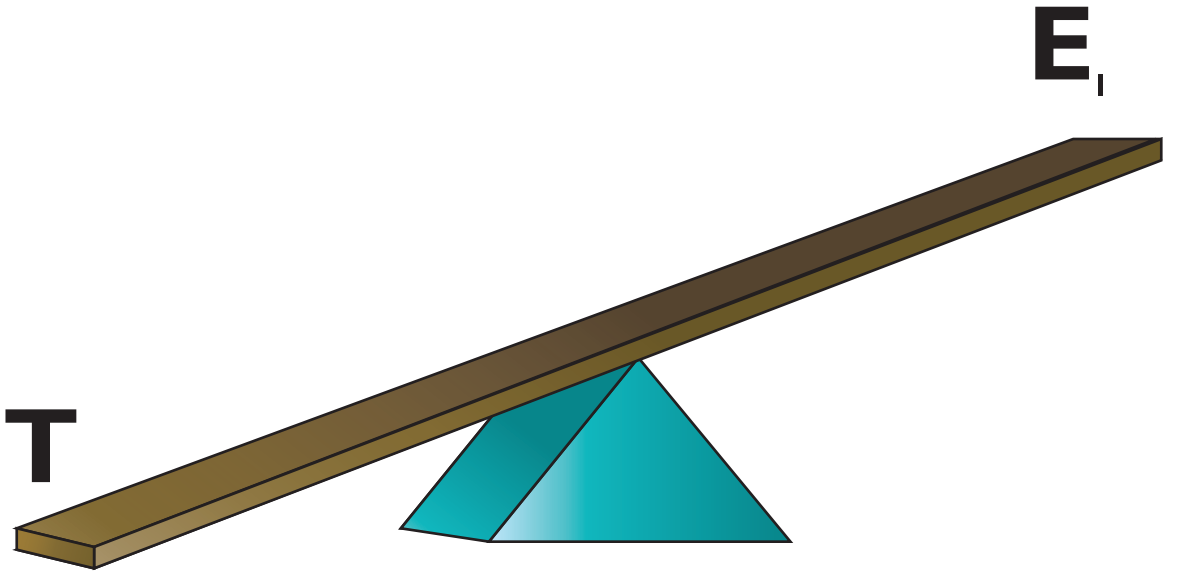
Research & Innovations
Community Commitment
Careers
For Employees
Resources for Medical Professionals

Site Information & Policies

Send Us Feedback
Site Map
About this Website
Copyright, Reprint & Licensing
Website Terms of Use
Privacy Policy
Notice of Privacy Practices
Non-Discrimination Notice

When testosterone decreases, estrone increases

T =Testosterone **E_1** =Estrone



Journal of Obstetrics and Gynaecology Canada
Volume 39, Issue 3, March 2017, Pages 124-130

Endocrinology

Testosterone in Women: Measurement and Therapeutic Use

Ann Kathryn Korkidakis MD, Robert L Reid MD

https://doi.org/10.1016/j.jogc.2017.01.006

Abstract

Androgens, both in excessive and depleted states, have been implicated in female reproductive health disorders. As such, serum testosterone measurements are frequently ordered by physicians in cases of sexual dysfunction and in women presenting with hirsutism. Commercially available androgen assays have significant limitations in the female population. Furthermore, the measurements themselves are not always informative in patient diagnosis, treatment, or prognosis. This article reviews the limitations of serum androgen measurements in women suspected to have elevated or reduced androgen action. Finally, we consider when therapeutic use of androgen replacement may be appropriate for women with sexual interest/arousal disorders.

Résumé

Divers troubles de santé génésique chez la femme découlent d'un taux anormal d'androgènes. C'est pourquoi les médecins demandent souvent un dosage du taux sérique de tes

les femmes atteintes d'hirsutisme ou souffrant de dysfonctionnement sexuel. L'efficacité des tests commerciaux de dosage des androgènes est toutefois limitée chez la femme, et les résultats ne permettent pas toujours de poser un diagnostic, de planifier un traitement ou de formuler un pronostic. Le présent article se penche sur les limites du dosage des androgènes chez les femmes semblant présenter une activité androgénique anormale et étudie les situations où une thérapie hormonale est appropriée chez les femmes atteintes d'un trouble de l'intérêt ou du désir sexuel.

Previous Next

Key Words

Hirsutism; polycystic ovary syndrome; libido; androgen assays

Abbreviations

11KDHT, 11-ketodihydrotestosterone; DHEAS, dehydroepiandrosterone; DHT, dihydrotestosterone; PCOS, polycystic ovary syndrome; SSE, satisfying sexual episode

Recommended articles Citing articles (11)

Competing interests: None declared.

View full text

Testosterone in women and lowering of cholesterol

Lipid profile modifications in post-menopausal women treated with testosterone gel Original Research Article

Endocrinología y Nutrición (English Edition), Volume 59, Issue 1, January 2012, Pages 44-49

ORIGINAL ARTICLE

Endocrine Care

Higher Serum Free Testosterone Concentration in Older Women Is Associated with Greater Bone Mineral Density, Lean Body Mass, and Total Fat Mass: The Cardiovascular Health Study