

Clomiphene helps by blocking that estrogen feedback and reducing the "off" signal to the pituitary, so that it can further stimulate the testes to produce testosterone. This way, clomiphene helps interrupt the pathway that leads to hypogonadotropic hypogonadism.



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## Testosterone restoration using enclomiphene citrate in men with .



The effects of oral administration of clomiphene citrate (50 mg/kg body weight) on the testis, epididymis and accessory sex glands of the musk shrew were investigated. The drug induced duration-dependent alterations in the weight and histology of these organs. The drug produced significant reduction ...

## Testosterone versus clomiphene citrate in managing symptoms of hypogonadism in men

Pranav Dadhich\*, Ranjith Ramasamy<sup>1</sup>, Jason Scovell, Nathan Wilken, Larry Lipschultz

Scott Department of Urology, Baylor College of Medicine, Houston, <sup>1</sup>Department of Urology, University of Miami Miller School of Medicine, Miami, Florida, USA

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### ABSTRACT

**Introduction:** Both clomiphene citrate (CC) and testosterone supplementation therapy (TST) are effective treatments for men with hypogonadism. We sought to compare changes in symptoms and treatment efficacy in hypogonadal men before and after receiving CC and TST.

**Patients and Methods:** 52 men who received TST and 23 men who received CC for symptomatic hypogonadism were prospectively followed for change in hormone levels and symptoms after treatment. These men were also compared to eugonadal men who were not on CC or TST during the same period. Comparisons were made between baseline and posttreatment hormone levels and symptoms. Symptoms were evaluated using the androgen deficiency in aging male (ADAM) and quantitative ADAM (qADAM) questionnaires.

**Results:** Serum total testosterone increased from pretreatment levels in all men ( $P < 0.05$ ), regardless of therapy type (TST: 281–541 ng/dL, CC: 235–438 ng/dL). Men taking TST reported fewer ADAM symptoms after treatment (5–2,  $P < 0.05$ ). Similarly, men taking CC reported fewer ADAM symptoms after treatment (3.5–1.5,  $P < 0.05$ ). Conversely, eugonadal men had similar T levels (352 vs. 364 ng/dL) and hypogonadal symptoms (1.5 vs. 1.4) before and after follow-up. When we evaluated individual symptoms, men treated with TST showed significant increases in qADAM scores in libido, erectile function, and sports performance. However, among the men who received CC, qADAM subscore for libido was lower following treatment (3.75–3.2,  $P = 0.04$ ), indicating that CC could have an adverse effect on libido in hypogonadal men.

**Conclusions:** Both TST and CC are effective medications in treating hypogonadism; however, our study indicates that TST is more effective in raising serum testosterone levels and improving hypogonadal symptoms. CC remains a viable treatment modality for hypogonadal men but its adverse effect on libido warrant further study.

### INTRODUCTION

Idiopathic age-related decline in testosterone in adult men is common, currently affecting close to 40% of adult males aged 45 and older.<sup>[1]</sup> Symptoms associated with decline in testosterone are often assessed using questionnaires such as the androgen deficiency in the aging male (ADAM) and quantitative ADAM (qADAM).<sup>[2,3]</sup> Lack of energy, erectile dysfunction, diminished libido, and a decrease in concentration are common symptoms in men with testosterone decline.<sup>[4,5]</sup> Although symptoms

are a critical part of the definition of clinically relevant hypogonadism, there is a dearth of studies evaluating the effect of testosterone therapy on hypogonadal symptoms.<sup>[7]</sup>

Clomiphene citrate (CC) is frequently used off-label for the treatment of hypogonadism in men who wish to preserve reproductive function.<sup>[8,9]</sup> CC is a selective estrogen receptor modulator. Through modulation of estrogen receptors at the hypothalamus and pituitary, CC antagonizes the negative feedback of estradiol, thereby enhancing the release of follicle stimulating hormone (FSH) and luteinizing hormone (LH). Increase in LH subsequently raises serum

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Financial support and sponsorship: Nil.

Conflicts of interest: There are no conflicts of interest.

Parameters included in the model were patient age, mean testicular volume, varicocele presence, and baseline total T, free T, and luteinizing hormone (LH) levels. Main outcome measure: Successful biochemical response to CC, defined as an increase of  $\geq 200$  ng/dL in total T level at  $\geq 6$  months after commencing CC, was the main outcome measure.

# Testosterone versus clomiphene citrate in managing symptoms of .

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Original Article

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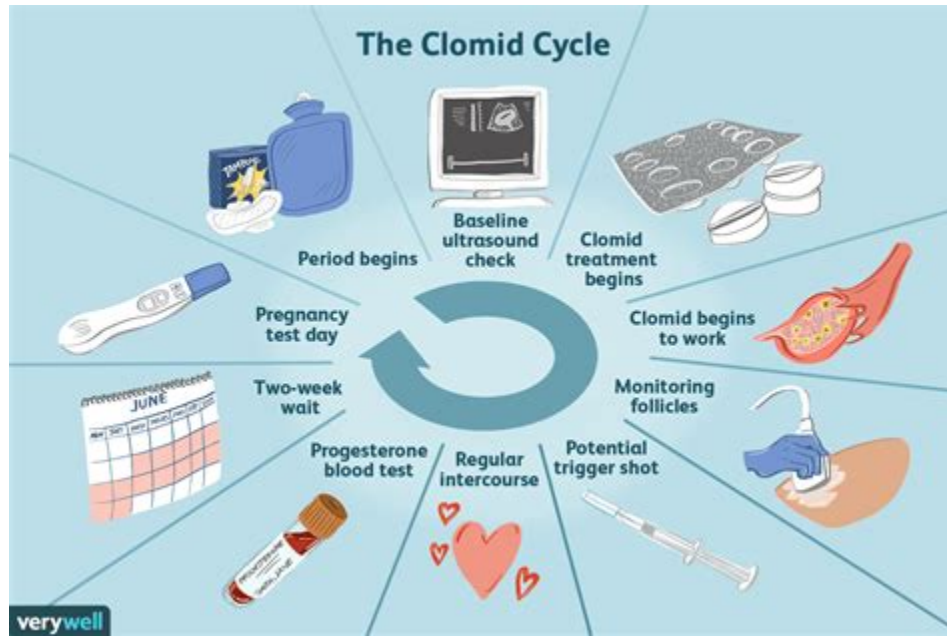
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Clomiphene citrate is an effective therapy for improving both biochemical as well as clinical symptoms of males suffering from hypogonadism. Clomiphene citrate has few reported side effects and good safety aspects. clomiphene citrate; male hypogonadism; testosterone deficiency. © 2021 American Society of Andrology and European Academy of Andrology.

## How long does clomid take to restore testicular size?



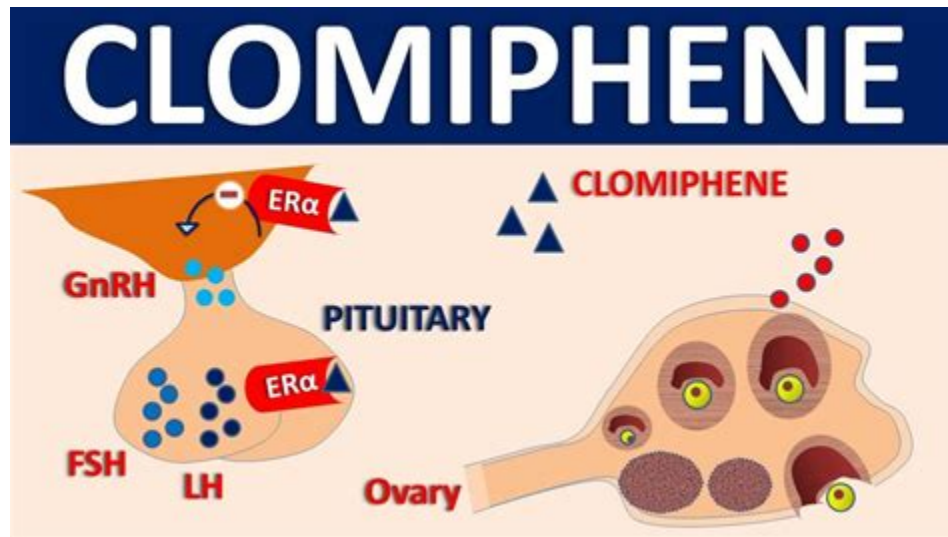
Does clomid work as good as hcg in restoring ball size? also how long would it take for clomid to increase testicles back to normal? thanks guys.

## Clomid for Testicular Shrinkage - Excel Male TRT Forum



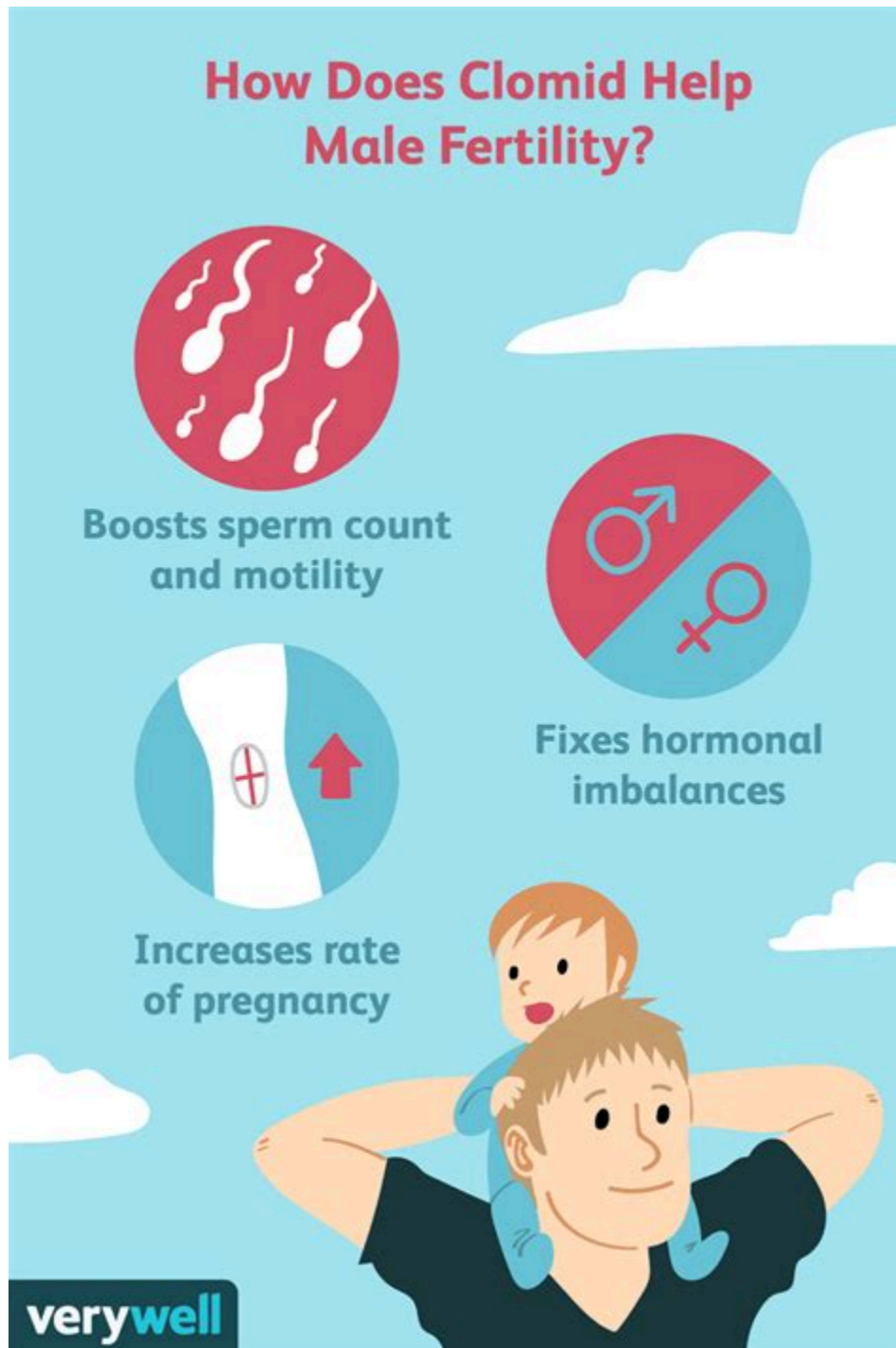
Effects on parenting Causes Seeking help Treatment Outlook What's the average testicle size? As with every other body part, testicle size varies from person to person, often with little or.

## Effect of clomiphene citrate on the testis, epididymis and . - PubMed



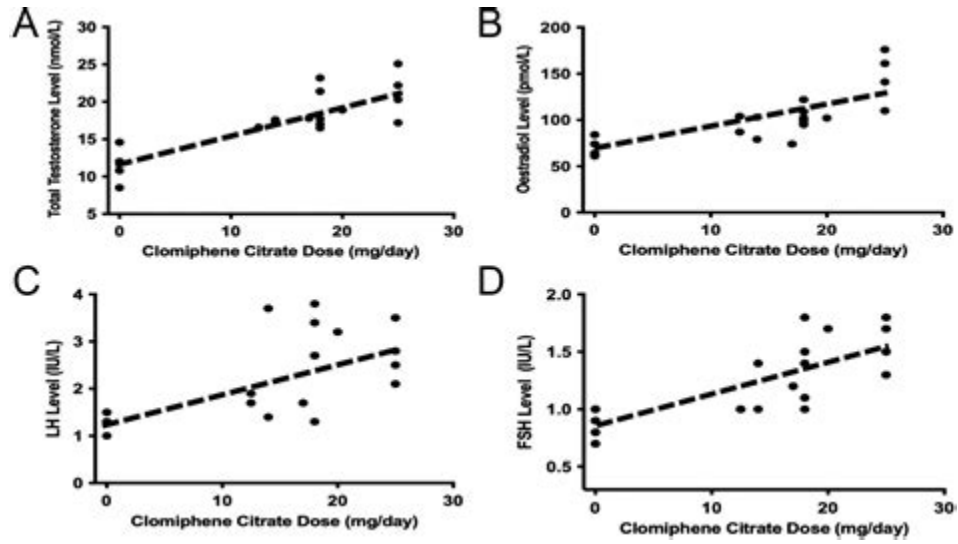
Takeaway Overview Clomid is a popular brand name and nickname for generic clomiphene citrate. The U. S. Food and Drug Administration (FDA) approved this oral fertility medication for use in women.

## Clomid for Men: Does It Increase Fertility? - Healthline



Clomiphene citrate is a drug that can stimulate the production of testosterone in men with hypogonadism, a condition characterized by low levels of the male hormone. This article reviews the clinical evidence and mechanisms of action of clomiphene citrate, as well as its potential benefits and risks for men's health. Read more to learn how clomiphene citrate can improve the testosterone .


## Dose-dependent response to long-term clomiphene citrate in male .



43 Reaction score 28 Points 3 Jan 26, 2022 #2 Steroids stop the production of gonadotropins. Without that, the pituitary gland stops making LH. Without LH, the testicles stop secreting your natural testosterone, leading to smaller testicles. Clomid fools you into thinking your test is dropping by blocking estrogen receptors in the brain.



## Clomid for Low Testosterone: How It Works, What to Expect | Ro




TESTOSTERONE NEWS & UPDATES

# CLOMIPHENE CITRATE

- 1) Learn more about Clomid and how it can raise your serum testosterone level.
- 2) How does Clomid increase your testosterone level?
- 3) Who should use Clomid?
- 4) Does Clomid maintain fertility?

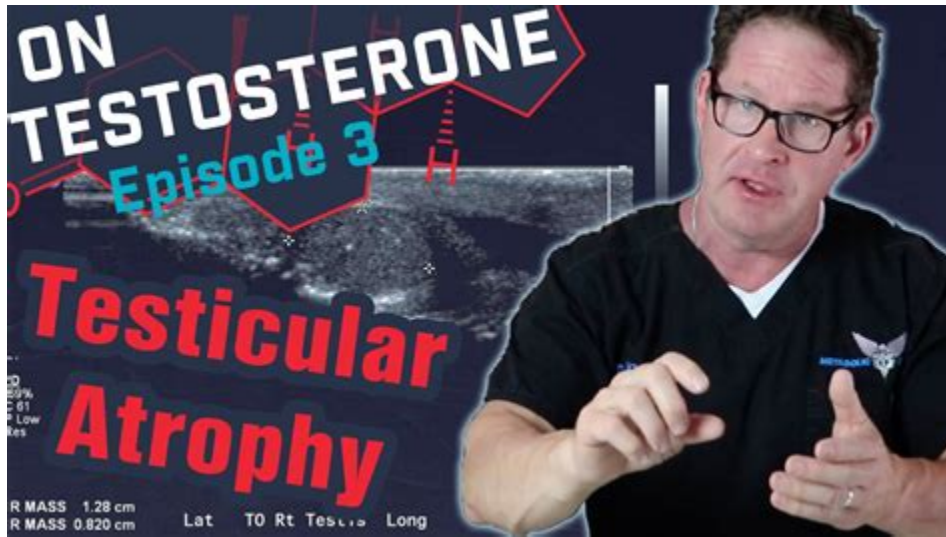
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**Published December 2019**  
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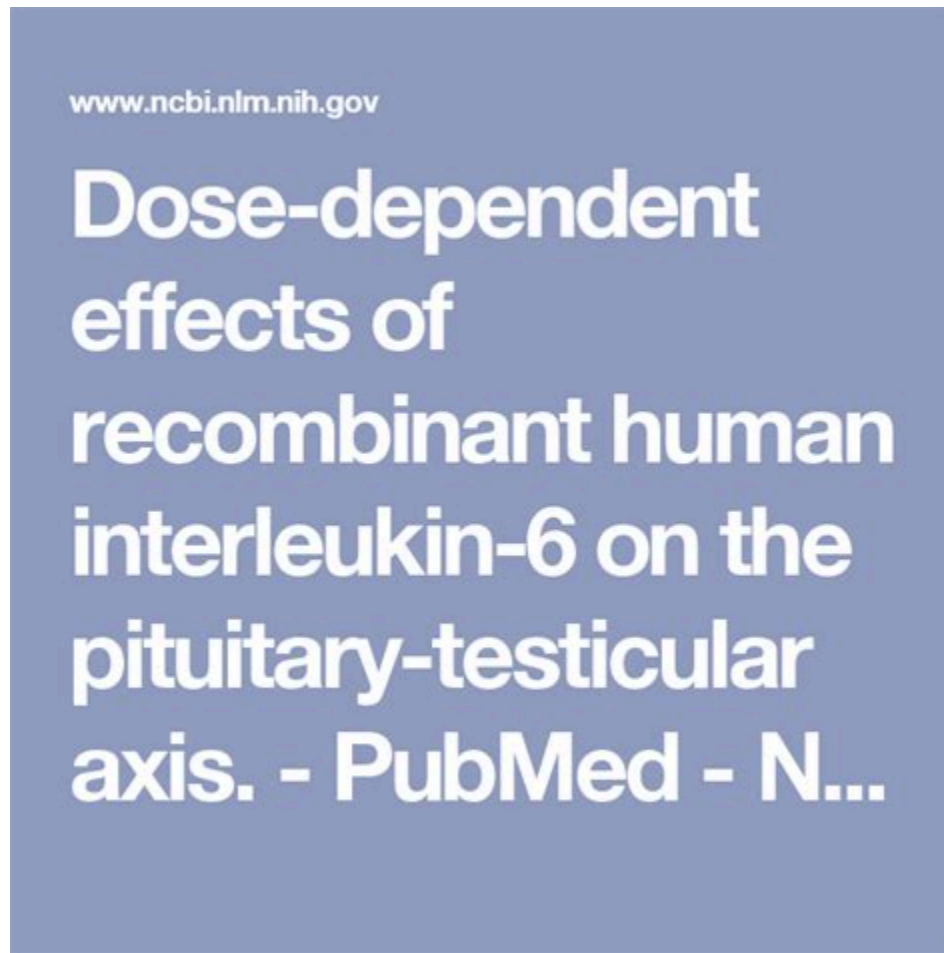
Using hCG every three days in combination with clomiphene citrate 25mg per day until normal testosterone levels are reached, maintain the dose until spermatozoa are present. Results: The mean age was  $30.2 \pm 5.6$ . Differences in penis length between the time before and after treatment were significant ( $p=0.005$ ).

## What Men Should Know About Testicular Shrinkage and Testosterone .



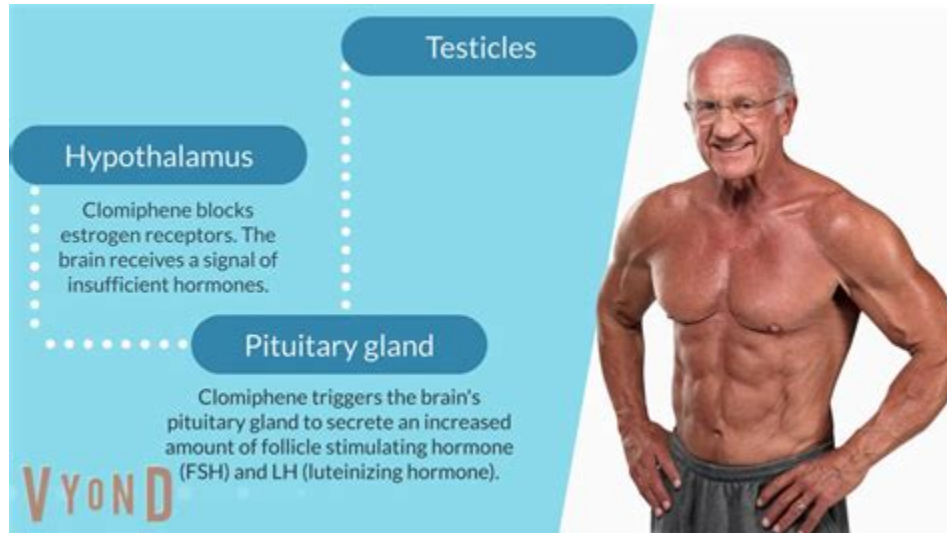
Question about clomid and testicle size. Question Have any guys here experienced changes in testicle size while taking clomid? I feel as if mine have become "fuller" not necessarily bigger. Anyone else notice something similar? 4 Sort by: Open comment sort options [deleted] • 4 yr. ago Yes, that's the point of clomid. 4 SpaceHallow OP • 4 yr. ago

## Effect of clomiphene treatment on the human testicular . - PubMed




The mean sperm count among men receiving enclomiphene citrate was 176 million/mL ( $p=0.004$ ). Additionally, only men on enclomiphene experienced an increase in LH and FSH levels. This study suggested that enclomiphene may represent a better treatment option in hypogonadal men wishing to preserve fertility, but was limited by a small sample size.

## CLOMID FOR MEN ON TESTOSTERONE REPLACEMENT THERAPY - Innovative Men



Symptoms of low T often include low sex drive, loss of muscle mass, infertility, and depression . Clomid raises testosterone levels and increases sperm production and motility ( Puia, 2022; Mbi Feh, 2022). Unlike testosterone replacement therapy (TRT), one of the main benefits of Clomid for low T is that clomiphene does not interfere with sperm .

## Clomiphene increases free testosterone levels in men with both . - Nature




TESTOSTERONE NEWS & UPDATES

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Clomiphene citrate was administered in 2 different modes. Group 1 (n = 8) was treated for 6 days (100 mg of the antioestrogen once a day) and a single dose of hCG (5000 IU im) was given at the beginning of the experiment. In group 2 (n = 9), the treatment was started 7 days prior to the hCG injection and was continued for additional 6 days.

## Predicting biochemical response to clomiphene citrate in men with .

TABLE 1.

		Response (n=88)	Failure (n=27)
Age		36 ± 7	36 ± 7
Race			
	White	90%	89%
	Black	9%	9%
	Other	1%	0%
BMI		30.9 ± 14.8	30.0 ± 5.5
Smoker		7%	13%
Alcohol use		58%	57%
<i>Pre-treatment</i> (mean ± SD)			
LH (IU/L)		4.0 ± 2.9	10.5 ± 17.9
FSH (IU/mL)		4.4 ± 4.9	7.8 ± 15.3
Hgb (g/dL)		15.4 ± 1.2	15.3 ± 1.2
TT (ng/dL)		271 ± 115	385 ± 334
TF (ng/dL)		20.6 ± 24.3	12.3 ± 10.9
LOT (months)		4.39 ± 5.09	4.7 ± 5.0
TV		17.4 ± 2.5	15.3 ± 2.2
<i>Post-treatment</i> (mean ± SD)			
TT (ng/dL)		640 ± 199	298 ± 170
TF (ng/dL)		40.5 ± 73	15.2 ± 19
Change in TT (ng/dL)		368 ± 214	-87 ± 245

Clomid is a pill taken daily. It is generic and cheap. No shots. It does not interfere with the body's checks and balances of testosterone. Fertility is preserved. No testicular shrinkage. It has few, if any, side effects and this is usually dose-related. Clomid, by increasing T levels, can produce the same/similar effects as traditional TRT.

## **Small Testicles: What Are the Causes, Dangers, and Effects? - Healthline**

# SIDE EFFECTS OF EXCESSIVE TESTICULAR SWEATING:



CHAFING & ITCHING

Sweaty testicles and groin area in general can cause the skin to become irritated with movement

A sweaty environment can be a breeding ground for bacteria. A bacterial infection can cause boils and other skin problems to develop. If left untreated, a bacterial infection on the skin can migrate elsewhere in the body and cause further serious issues.



BACTERIAL INFECTIONS



FUNGAL INFECTION

A fungal skin infection, like jock itch, thrives in a sweaty environment where two areas of skin rub together

## Treating Excessive Testicular Sweating:



✓ Talcum powder



✓ Cornstarch



✓ Surgery



✓ Prescription medications

✓ Spend more on "pouch" underwear made from breathable fabrics

[www.bn3th.co.uk](http://www.bn3th.co.uk)



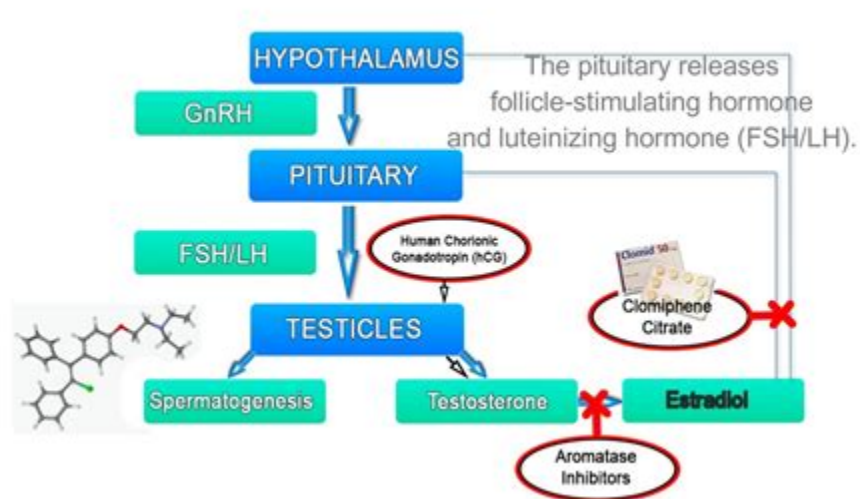
Once this decline in testosterone levels begins, there may be a decrease by 1%-2% per year. 10 However, the prevalence of low testosterone in younger men is increasing, which complicates the treatment options. 1, 2 Classically, TRT has been the treatment of choice for hypogonadism, however; other long-acting TRT modalities suppress the .

## Clomid balls bigger?? - AnabolicMinds



Sep 06, 2023 If you're considering testosterone replacement therapy, understanding its effects on testicular size is crucial. Learn why shrinkage occurs, the treatments available to mitigate this side effect, and why testicle size usually has minimal impact on your overall health.

## Converting Men From Clomiphene Citrate to Natesto for Hypogonadism .



Clomiphene increases free testosterone levels in men with both secondary hypogonadism and erectile dysfunction: who does and does not benefit? | International Journal of Impotence Research.

Question about clomid and testicle size. : r/Testosterone - Reddit

## Does The **Size Of Your Testicles** Affect **Testosterone Levels**



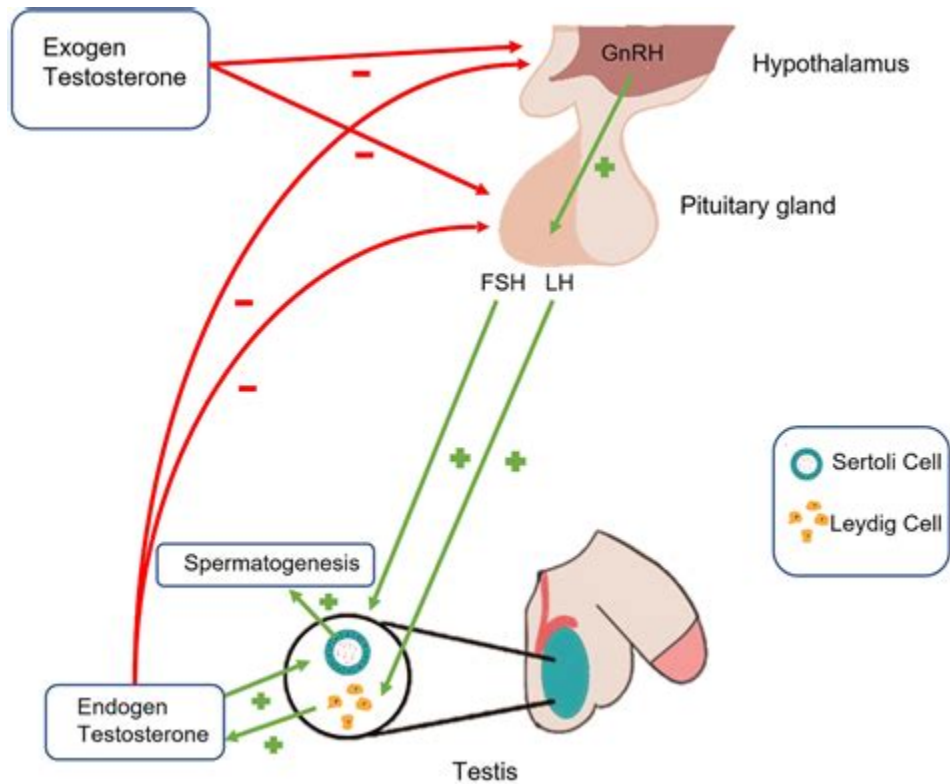
Clomiphene citrate is a selective oestrogen receptor modulator that acts centrally to increase endogenous testosterone without affecting fertility. Although it has demonstrated effectiveness in shorter-duration studies, its longer-term outcomes are less well-documented. . Testicular ultrasound showed a small 2.8 mm left epididymal cyst and a .

## Enclomiphene Citrate for the Treatment of Secondary Male Hypogonadism



Dec 1, 2019 #3 scguy2020 said: guys in the group i had questions about clomid. Does clomid help restore your testicles if they have started shrinking? and if so how long does it take for it for it to start working? Have you tried HCG? It works for most men.

## Male Hypogonadotropic Hypogonadism: The Emerging Role of Clomiphene



This increase in qADAM indicates that patients on TST displayed a significant quantifiable improvement in symptoms and experience less severe hypogonadal symptoms than men taking CC. Conversely, eugonadal men had similar T levels (352 vs. 364 ng/dL) and hypogonadal symptoms (1.5 vs. 1.4) before and after follow-up.


# Clomiphene citrate for men with hypogonadism: a systematic review and .

Received: 24 August 2021 | Revised: 22 October 2021 | Accepted: 17 December 2021  
DOI: 10.1111/and.13146

REVIEW ARTICLE

ANDROLOGY  WILEY

## Clomiphene citrate for men with hypogonadism: a systematic review and meta-analysis

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### Abstract

**Background:** Male hypogonadism is a clinical and biochemical androgen insufficiency syndrome, becoming more prevalent with age. Exogenous testosterone is first-choice therapy, with several side effects, including negative feedback of the hypothalamic-pituitary-gonadal axis, resulting in suppression of intratesticular testosterone production and spermatogenesis. To preserve these testicular functions while treating male hypogonadism, clomiphene citrate is used as off-label therapy. This systematic review and meta-analysis aimed to evaluate the effectiveness and safety of clomiphene citrate therapy for men with hypogonadism.

**Methods:** The EMBASE, PubMed, Cochrane databases were searched in May 2021, for effectiveness studies of men with hypogonadism treated with clomiphene citrate. Both intervention and observational studies were included. The Effective Public Health Practice Project Quality Assessment Tool, a validated instrument, was used to assess methodological study quality. The primary outcome measure was the evaluation of serum hormone concentration. Secondary outcomes were symptoms of hypogonadism, metabolic and lipid profile, side effects, safety aspects.

**Results:** We included 19 studies, comprising four randomized controlled trials and 15 observational studies, resulting in 1642 patients. Seventeen studies were included in the meta-analysis, with a total of 1279 patients. Therapy and follow-up duration varied between one and a half and 52 months. Total testosterone increased with 2.60 (95% CI 1.82–3.38) during clomiphene citrate treatment. An increase was also seen in free testosterone, luteinizing hormone, follicle stimulating hormone, sex hormone-binding globulin and estradiol. Different symptom scoring methods were used in the included studies. The most frequently used instrument was the Androgen Deficiency in Aging Males questionnaire, whose improved during treatment. Reported side effects were only prevalent in less than 10% of the study populations and no serious adverse events were reported.

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