

## عنوان مقاله:

Effect of letrozole on spermogram parameters and hormonal profile in infertile men: A clinical trial study

## محل انتشار:

سومین کنگره بین المللی چالش های بالینی در مامائی، زنان و نازائی (سال: 1398)

تعداد صفحات اصل مقاله: 1

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## خلاصه مقاله:

**Background and Aim :** There is no reliable treatment for men with idiopathic infertility, but the relationship between severe sperm production and the ratio of estrogen to testosterone levels has been shown. Aromatase is an enzyme that plays an important role in converting testosterone to estradiol and androstenedione to estrogen. Aromatase inhibitors can increase testosterone and androgen production without increasing the amount of estrogen in circulation. The aim of this study was to evaluate the effect of aromatase inhibitor letrozole on the male infertility.

**Methods :** This pre- and post-quasi-experimental clinical trial was carried out on 41 men with an infertility diagnosis. The basic hormonal profile included FSH, LH, testosterone, and estradiol. The ratio of testosterone to serum estradiol was also calculated and recorded. The sperm analysis was performed before the treatment and the seminal parameters were evaluated and recorded. Patients were then treated with letrozole 2.5 mg daily for 4 months. At the end of 4th months, the hormonal profile was studied and seminal analysis performed and recorded.

**Results :** The levels of FSH, LH, testosterone, and estradiol, and the ratio of testosterone to estradiol increased significantly after letrozole treatment. The sperm concentration, sperm motility, and sperm forward motion significantly increased after letrozole treatment. Sperm morphology only lightly altered.

**Conclusion :** The ratio of testosterone to estradiol levels in infertile men treated with aromatase inhibitor improved and caused changes in sperm parameters. Letrozole may be used to improve sperm parameters in infertile men with low serum testosterone to estradiol ratio.

## کلمات کلیدی:

male infertility, aromatase inhibitor, testosterone, estradiol, letrozole

## لینک ثابت مقاله در پایگاه سیویلیکا:

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